# SHREEMATI NATHIBAI DAMODAR THACKERSEY WOMEN'S UNIVERSITY

(Waterproofing on Terrace of C. U. Shah College of Pharmacy)



#### **VOLUME 1: Conditions of Contract**

TENDER DOCUMENT

# **OWNER:**

The Registrar 1, Nathibai Thackersey Road, Churchgate, Mumbai 400 020.

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#### TENDER NOTICE

Ref No. Est. Univ/(RM/J)-2/2019-20/02

Dear Madam/Sir,

On behalf of, The Registrar SNDT WOMEN'S UNIVERSITY invites fresh percentage Rate E-tenders for Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai.

Tender forms can be obtained on https://maharashtra.etenders.in from 10<sup>Th</sup> January 2020.

The tenders will be submitted online on or before 22<sup>Nd</sup> January 2020 up to 5.00 p.m. Tender opening details are as per E-tender schedule. Contractors should remain present at the time of tender opening. Any change in the opening time and date will be communicated on website of the University and on E-Tender Portal. The employer reserves the right to reject any or all tenders without assigning any reasons thereof and to open the tender in case bidders will be absent for tender opening.

#### E-Tender Schedule is as below:

Seq No	ALLGOM Stage	Vendor Stage	Start Date & Time	Expiry Date & Time
1	Release of tender	-	10-01-2020 11:00	10-01-2020 15:00
2	-	Tender Download	10-01-2020 15:01	20-01-2020 17:00
3	-	Bid Preparation	10-01-2020 17:01	20-01-2020 17:00
4	Superhash Generation & Bid Lock	-	20-01-2020 17:01	21-01-2020 17:00
5	-	Control Transfer of Bid	21-01-2020 17:01	22-01-2020 17:00
6	Envelope 1 Opening	-	23-01-2020 11:00	23-01-2020 13:00
7	Envelope 2 Opening	-	23-01-2020 11:00	23-01-2020 13:00

#### **OWNER:**

The Registrar, SNDT Women's University, 1, Nathibai Thackersey Road, Churchgate, Mumbai 400 020. Date: 09/01/2020

#### DETAILED TENDER NOTICE TO CONTRACTOR

**1.1** Sealed **Percentage** tenders are invited from Civil Contractors for the work as per the following details:

1.1.1	Name and Location of Work	Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai.		
1.1.2	Cost of Tender	DD of Rs. 500 /- Rupees Five Hundred only (Non Refundable) to be paid through Online Payment Modes i.e. Net Banking, Debit Card and Credit Card		
		during Tender Document Download Stage.		
1.1.3	Scope of Work	Terrace Water Proofing		
1.1.4	Date of Commencement	Date of Work Order		
1.1.5	Time of Completion	As per E-Tender Schedule from the date of Work Order		
1.1.6	Date and Place of Submission of Tender	As per E-Tender Schedule		
1.1.7	Time of Opening	11.00 a.m. on 23 <sup>Rd</sup> January 2020 at SNDT Women's University, 1, Nathibai Thackersey Road, Churchgate, Mumbai 400 020.		
1.1.8	Earnest Money	<b>Rs. 19,000 /- (Rs. Nineteen Thousand only)</b> to be paid through Online Payment Modes i.e. Net Banking, Debit Card, Credit Card and NEFT/RTGS during Bid Preparation Stage.		
1.1.9	Total Security Deposit	<ul> <li>a) Total 5% of value of work (inclusive of all Taxes)</li> <li>b) 3% (Including EMD) of accepted tendered amount (including all taxes) to be deposited within ten (10) days of acceptance of tender.</li> <li>c) Remaining 2% of total security deposited will be recovered from the R.A. Bills.</li> </ul>		
1.1.10	Refund of security deposit	<ul> <li>a) 50% of security deposit to be refunded after issue of certificate. Virtual completion.</li> <li>b) Balance 50% of security deposited to be refunded After expiry of defects liability period of 12 months and its proper discharge.</li> </ul>		
1.1.11	<b>Defects Liability Period</b>	12 months from date of Virtual Completion.		
1.1.12	Liquidated Damage	(1/2000) $^{\rm th}$ of the initial contract price rounded off to the nearest thousand per day .		

1.1 Online tenders in B-1 form are invited for the following work, from Contractors registered in PWD, CPWD, any other Government agencies and contractor from Private Sector, Mumbai region.

The offer of the Contractor shall remain valid for acceptance for a minimum period of 120 days from the date fixed for opening of envelope no. 2 (Main Tender) and thereafter until it is withdrawn by the Contractor by notice in writing duly addressed to the authority opening the tender and sent by Registered Post Acknowledgment due.

- 1.2 The tender notice shall form a part of the contract agreement.
- 1.3 The blank tender forms will be available on E Tender form of Government of Maharashtra Portal
- 1.4 The tenderer if firm or company shall in their forwarding letter mention the names of all the partners of the firm or the company (as the case may be) and the name of the partner who holds the power of attorney if any, authorizing him to conduct transaction on behalf of the firm or company.
- 1.5 Right is reserved to revise or amend the contract documents fully or part thereof prior to the date notified or amended for the receipt of tender. Such deviations/amendments if any shall be communicated in the form of corrigendum published on portal and official website of the university or by a letter as may be considered suitable.
- 1.6 Right is reserved to reject any or all tenders without assigning any reason thereof.
- 1.7 Tenders which do not fulfill all or any conditions or are incomplete in any respect are liable to summary rejection.

#### 2. EARNEST MONEY

- 2.1 Earnest money of **Rs. 19,000 /- (Rs. Nineteen Thousand Only) (if applicable)** is to be paid through Online Payment modes i.e. **Net Banking, Debit Card, Credit Card and NEFT/RTGS** during Bid Preparation Stage.
- 2.2 Tender of those who do not deposit earnest money in one of the above acceptable forms shall be summarily rejected.
- 2.3 Earnest money in any other form of cash or cheque will not be accepted.
- 2.4 The amount of earnest money will be refunded to the unsuccessful tenderer on deciding about the acceptance or otherwise of the tender or on expiry of the validity period whichever is earlier.

In case of the successful tenderer on his paying the initial security deposit and completing the tender documents. If successful tenderer does not pay the security deposit in the prescribed time limit and complete the agreement bond, his earnest money deposit will be forfeited to the SNDT women's university.

#### 3. <u>TENDERING PROCEDURES</u>

#### 3.1 Blank tender forms:-

Blank tender forms can be obtained from the Maharashtra Government's E-Tender Portal. No hard copy will be provided from any office of the University. Blank tender document will be available on official web site of the SNDTWU.

#### 3.2 <u>Manner of submission of tender and its accompaniments</u>

Tender should be submitted on E-Tender Portal as well as tender should be submitted in two separate sealed envelopes to the address mentioned above 72 hours before Tender opening date.

Tenderer shall submit the tender and documents in two sealed envelopes as below:-

#### 3.2.1 Envelope No. 1 (Technical Bid) :-

The first envelope clearly marked as **"ENVELOPE NO. 1"** shall contain the following documents which are obligatory:-

- 1) Forwarding letter indicating the documents contained therein.
- 2) Certificate of registered Contractor who are registered with the Government of Maharashtra in Public Works Department/ Central Public Works Department in appropriate class as may be applicable (Duly attested by Government Gazetted officer) except contractor who are working in private sector.
- 3) The contractors who are working in private sector should attach work experience certificate.
- 4) Details of the other works tendered for and in hand with the value of the work unfinished on the last date of submission of tender. Certificate from the Head of the Offices under whom the works are in progress should be enclosed.
- 5) A list of modern machinery and plants immediately available with the tenderer for use on this work.
- 6) Details of works of similar type and magnitude carried out by the Contractor.
- 7) Details of works carried out in the interior, Backward and Hilly areas during the preceding 5 years if applicable.
- 8) Details of technical personnel on the rolls of tenderer.
- 9) Attested copy of partnership deed if the tenderer is a partnership firm and Power of Attorney.
- 10) Declaration to be filled in by the Contractor/Firm.
- 11) Written agreement between main Civil contractor and Electrical contractor (registered with PWD in appropriate class) shall be submitted in original along with the Registration copy of Electrical contractor before the work order is issued. (If applicable)
- 12) Attested copy of **PAN-Card** issued by Income Tax Department or attested copy of latest Income Tax return (**Form-2D**) submitted to Income tax Department.

Note - In absence of the any of the documents listed above, the tender will not be considered for further action and ENVELOPE No. 2 will not be opened.

# 3.3.2 Envelope No. 2 (Commercial Bid) :-

The second envelope clearly marked as **Envelope No. 2** shall contain only the main tender including the common set of condition/stipulations issued by the University after the Pre-tender Conference. A tender submitted without this would be considered as invalid.

The tenderer should quote his offer on Schedule 'B' of the tender as item rates or percentage of estimated rates at the appropriate place of tender documents, to be submitted only in envelope No. 2. He should not quote this offer anywhere directly or indirectly in envelope No. 1. The Contractor shall quote for the work as per details given in the main tender and also based on the detailed set of conditions issued/additional

stipulations made by the University as informed to him by a letter from University Engineer after Pre-tender Conference. This tender shall be unconditional.

#### 3.4 SUBMISSION OF TENDER:-

- 3.4.1 No delays on account of any cause will be entertained for the late receipt of tender. Tender offered or received after the date and time is over will either not be accepted or if inadvertently accepted, will not be opened and shall be returned to the tenderer unopened.
- 3.4.2 All Xerox copies submitted in connection with tender shall be attested. Otherwise their tender will not be considered for further action & Envelope No. 2 will not be opened.

#### 3.5 **Opening of Tenders:**

On the date specified in the tender notice following procedure will be adopted for opening of the tender. The authority competent to open the tenders will first open the sealed cover as mentioned above in the presence of tenderers or their authorized representatives as may be present on the day of opening the tender.

#### Envelope No. 1:-

First of all, Envelope No. 1 of the tender will be opened through online procedure to verify its contents as per requirements. If the various documents contained in this envelope do not meet the requirements of the SNDT women's university, a note will be recorded accordingly by the tender opening authority and the said tenderer's Envelope No. 2 will not be considered for further action but the same will be recorded.

#### Envelope No. 2:-

This envelope shall be opened after scrutiny of the documents submitted in Envelope No. 1 and only if contents of Envelope No. 1 are found to be acceptable to the University. The tendered rate in Schedule 'B' or percentage above/below the estimated rates shall then be read out.

#### 3.6 Acceptance of Tender:-

- 3.6.1 The acceptance of tender may be communicated to the Contractor on portal only.
- 3.6.2 The successful tenderer will be required to produce, to the satisfaction of the specified concerned authority, a valid and concurrent license issued in his favour under provisions of the Contract Labour (Regulation and Abolition) Act, 1970 before starting the work. On failure to do so, the acceptance of tender is liable to be withdrawn and earnest money forfeited.
- 3.6.3 The tenderer whose tender is accepted will have to give an undertaking in writing to the effect that he/they will pay the labours engaged on the work, the wages as per Minimum Wages Act, 1948, applied to the zone in which the work lies and act accordingly.
- 3.6.4 The Contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees' Liability Act, 1938, Workmen's Compensation Act, 1961, The Contract Labour (Regulation and Abolition) Act, 1979, and any

- modification thereof or any law relating thereto, and rules made there under from time to time.
- 3.6.5 The Contractor whose tender is accepted is required to note that no foreign exchange will be released by the SNDT women's university.
- 3.6.6 The Contractor will have to sign the original copy of the tender papers and the drawings according to which the work is to be carried out. The Contractor shall also have to give a declaration to the effect that he has fully studied the plans, specifications, local conditions, and availability of labour and materials and that he has quoted his rates with the consideration to all these factors.

#### 3.7 Security Deposit:-

- **3.7.1** The successful tenderer shall have to pay 50% security deposit in the form of Demand Draft issued by Nationalized Bank and complete the contract documents failing which his earnest money will be forfeited. The balance 50% security deposit will be recovered from the R.A. bills at 5% of the bill amount.
- **3.7.2** In the event of failure of the tenderer to pay cash security deposit **within 10 days** (unless extended in writing by the University Engineer SNDT women's university) from the date of receipt of notice (sent by registered Post) of acceptance of his tender, the amount of earnest money shall be forfeited to University and the acceptance of his tender, shall be considered as withdrawn.
- 3.7.3 All compensation or other sums payable by the Contractor under the terms of this contract or any other contract or on any account may be deducted from his Security Deposit or from any sums which may be due to him or may become due to him by University on any account and in the event of the security being reduced by reason of any such above noted deductions, the Contractor shall within 10 days of receipt of notice of demand from the Engineer-in-charge make good the deficit.
- **3.7.4** There shall be no liability on the University to pay any interest on the Security Deposited by or recovered from the Contractor.
- **3.7.5** The Security Deposit shall be refunded after completion of defect liability period prescribed for this contract in accordance with the provisions in clause 1 and 20 of the contract.

#### **ACKNOWLEDGEMENT BY TENDERER**

To,

**The Registrar,** (hereinafter referred to as the Owner).

SNDT Women's University, 1, Nathibai Thackersey Road, New marine lines, Churchgate, Mumbai 400 020.

Dear Sir / Madam,

I / We have visited the site, got all the information of site conditions and information regarding execution of contract, facilities available at site / offered by the University, read and examined all documents relating to the proposed work

- a. Notice inviting tender
- b. Prequalification form
- c. Articles of Agreement
- d. General Conditions of Contract
- e. Special Conditions of Contract
- f. General Specifications of Work
- g. Schedule of Quantities & other documents specified in Index

I / We hereby tender for execution of the works referred to the in the aforesaid documents upon the terms and conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details at the rate contained in the SCHEDULE OF QUANTITIES and within the period (s) of completion as stipulated.

In consideration of I / we being invited to tender, I / we agree to keep the tender open for acceptance for 90 days from the due date of submission thereof and not to make any modification in its terms and conditions which are not acceptable to the Owner.

If I / we fail to keep the tender open as aforesaid or make any modification in the terms and conditions of the tender which are not acceptable to the Owner, I / we agree that the Owner shall, without prejudice to any other right or remedy, be at liberty to forfeit the amount of the above said earnest money absolutely. Should this tender be accepted, I / we agree to abide by and fulfill all the terms, conditions and provisions of the aforesaid documents.

If, after the tender is accepted, I / we fail to commence the execution of the works, as provided in the Special Conditions of Contract / we agree that the Owner shall, without prejudice to any other right or remedy, be at liberty to forfeit the above said earnest money absolutely.

I / we agree that should the Owner decide to forfeit earnest money as aforesaid, unless a sum equal to the earnest money sanctioned above is paid by us forthwith, the Owner may, at its option, recover it out of the deposit and in the event of deficiency, out of any other money due to me/us otherwise.

DULY AUTHORIZED TO SIGN THE TENDER	:	
(ON BEHALF OF THE CONTRACTOR)		
ADDRESS	:	
DATE		
DATE	:	
PHONE NUMBER	:	
EMAIL ADDRESS	:	
WITNESS	:	
SIGNATURE IN THE CAPACITY OF	:	
ADDRESS	:	
DATE	:	

# **ARTICLES OF AGREEMENT**

	Agreement made at Mumbai this day of 2020 BETWEEN "The Registrar,
SNDT	Women's University, Mumbai" (hereinafter referred to as the Owner which expression
shall	include it successors and assigns) of the one part, AND, M/s
	(hereinafter referred to as the Contractor which expression
	nclude his heirs, Executors, Administrators & Assigns) of the other part.
onan i	morado mo nono, Encodeoro, riamininos decidos de riborgino, or encodencir par d
WILL	DEAS the Owner is desirous of Constructing Proposed E Tender Weterproofing of
	REAS the Owner is desirous of Constructing Proposed E-Tender Waterproofing of
	ice of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus,
Mum	
NETT	TOTAL COST: Rs
(In w	ords Rs AND WHEREAS the Contractor
has	deposited as Security Deposit a sum of Rs
(Rs	) with the owner for the due
perfo	rmance of this agreement.
NOW	IT IS HEREBY AGREED AS FOLLOWS:
1)	In consideration of the payments to be made to the contractor as hereinafter provided,
<b>1</b> )	he shall upon and subject to the said conditions execute and complete the works shown
	- · · · · · · · · · · · · · · · · · · ·
	upon the said drawings and such further detailed drawings as may be furnished to him
	by the University and described in the said specifications and the said priced schedule of
	quantities.
2)	The Owner shall pay the contractor such sums as shall become payable hereunder at the
	times and in the manner specified in the said conditions.
	•
3)	The drawings, specifications, and priced schedule of quantities above mentioned shall
3)	form the basis of this contract and the decision of the University Engineers for the time
	being as mentioned in the conditions of contract in reference to all matters of dispute as
	to the material, workmanship or account and as to the intended interpretation of clauses
	of this agreement or any other document attached hereto shall be final and binding on
	both parties and may be made a Rule of Court.
4)	The said contract comprises the constructions above mentioned and all subsidiary
- )	works connected therewith within the said site as may be ordered to be done from time
	to time by the University for the time being even though such works may not be shown
	on the drawings of described in the said specifications or the priced schedule of
	quantities.

The Owner reserves to himself the right of altering the drawings and nature of the work and adding to or omitting any items of the work or of having portions of the same

5)

carried out departmentally or otherwise and such alterations or variations shall be carried out departmentally or otherwise and such alterations or variations shall be carried out without prejudice to this contract.

- The said conditions and appendix thereto shall be read and continued as forming part of this agreement and the parties hereto will respectively abide by and submit themselves to the conditions and stipulations and perform the agreement on their parts respectively in such conditions contained.
- 7) All disputes arising out of or any connected with this agreement shall be deemed to have arisen in Mumbai and only the Hon'ble Court in Mumbai shall have jurisdiction to determine the same.
- 8) The several parts of this contract have been read to us and fully understood by us.

  As witness our hands this \_\_\_\_\_\_ day of 2020.

  SIGNED BY THE SAID OWNER

  IN THE PRESENCE OF

  1.

  2.

  SIGNED BY THE SAID CONTRACTOR

  IN THE PRESENCE OF

  1.

2.

# **PRE-QUALIFICATION OF TENDERERS**

Pre-Qualification of the Contractors for the Work of:

"Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai."

1. The Registrar, on behalf of the Vice Chancellor, SNDT Women's University, invited eligibility documents from firms/contractors of repute for Pre-qualification of the contractor for issue of tender for the following:

Sr. No.	Name of Work	Estimated Cost	Period of Completion
(1)	(2)	(3)	(4)
1.	Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai.	Rs. 18,65,197.2/- Excluding GST ( GST will be paid as per actual)	75 Days.

- 2. Application supported by prescribed annexure along with supporting documents in physical form, shall be placed in sealed envelopes marked "Pre-qualification Eligibility Documents" and shall be submitted as described in detail Tender notice.
- 3. Final decision making authority
  - 3.1. SNDT Women's University reserves the right to accept or reject any bid and to annul the process and reject all bids at any time, without assigning any reason or incurring any liability to the parties.

#### 4. General

- 4.1. All information called for in the enclosed forms should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a "nil" or "no such case" entry should be made in that column. If any particulars/query is not applicable in case of the party, it should be stated as "not applicable" or "N.A.". The parties are cautioned that not giving true and complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information shall result in the summarily disqualifying the party. Pre-qualification documents received late will not be entertained.
- 4.2. Overwriting should be avoided. Correction, if any, should be made by neatly crossing out, initialing, dating and rewriting. Pages of the eligibility criteria document shall be numbered. Additional sheets, if any added by the party, shall also be numbered. All the

- documents shall be sealed and signed by the party. They shall be submitted as a package with signed letter of transmittal.
- 4.3. References, information and certificates from the respective clients certifying suitability, technical knowledge or capability of the party shall be submitted along with the tender documents.
- 4.4. The party may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. It is, however, advised not to furnish superfluous information. No information shall be entertained after submission of eligibility criteria document unless it is called for by the SNDT Women's University.
- 4.5. Any information furnished by the party found to be incorrect either immediately or at a later date, would render him liable to be debarred from tendering/taking up of work in SNDT Women's University. If such party happens to be enlisted contractor in SNDT Women's University, it shall also be removed from the approved list of contractors.
- 4.6. List of documents / certificates to be submitted by the contractor together with the tender:
  - 1 Name of the firm
  - 2 Ownership document
  - 3 Income Tax Clearance certificate to indicate turnover of the company.
  - 4 Last/previous year's balance sheet (audited)
  - 5 List of equipment proposed to be employed at site.
  - 6 List of manpower proposed to be employed at site.
  - 7 Earnest Money deposit in the requisite format.
  - 8 List of specialized contractors for the specialized works.
  - 9 Construction schedule for the project.
  - Details of works carried out in the last 5 years.
  - 11. Copies of registration of
- ➢ GST
- ➤ WCT / MP Act.
- Labour License/Insurance
- And other Government document required for civil works.
- 5. Criteria for eligibility:

Contractors who fulfill the following requirements shall be eligible for pre-qualification.

- 5.1. Should have satisfactorily completed the works as mentioned below during the last 5 years ending 31st March 2019
- 5.1.1. Three (3) similar works, each costing not less than 7.6 Lacs, or two (2) similar works, each costing not less than 9.5 lacs, or one (1) similar work costing not less than 15.2 lacs.
- 5.1.2. Similar work shall mean Terrace Water proofing for Residential / Commercial / Institutional building / Sports Facility buildings. For this purpose cost of work shall mean gross value the completed work including cost of material supplied by the Government/Client but excluding those supplied free of cost. This should be certified by an officer not below the rank of Executive Engineer/Project Manager or equivalent.
- 5.2. Should have had average annual financial turnover not less than two and a half times the estimated annual payments under the contract during the last three (5) consecutive

- financial years ending 31<sup>st</sup> March 2019. This should be duly audited by a Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average.
- 5.3. Should not have incurred any loss in more than two (2) years during the last 3 years ending 31st March 2019. This should be duly audited by a Chartered Accountant.
- 5.4. Should have a solvency of 50 lakhs, which should be certified by the bank.
- 5.5. Should have own constructions equipment as per list required for the proper and timely execution of the work. Else, he should certify that he would be able to manage the equipment by hiring etc., and submit the list of firms from whom he proposes to hire.
- 5.6. Should have sufficient number of Technical and Administrative employees for the proper execution of the contract. The party should submit a list of these employees stating clearly how these would be involved in this work.

#### 5.7. Financial information

- 5.7.1. Party should furnish the Annual financial statement for the last three (3) years.
- 5.7.2. Party should furnish solvency certificate in Form "B".
- 5.8. Experience in works highlighting experience in similar works
  - 5.8.1. Party should furnish list of all works of similar nature successfully completed during the last seven years in Form "C".
  - 5.8.2. Party should furnish list of the projects under execution or awarded in Form "D".
  - 5.8.3. Particulars of completed works and performance of the party duly authenticated/certified by an officer not below the rank of Executive Engineer or equivalent should be furnished separately for each work completed or in progress in Form "E".

#### 6. Letter of transmittal

6.1. The party should submit the letter of transmittal attached with the document.

### 7. Selection criteria

- 7.1. SNDT Women's University reserves the right, without being liable for any damages or obligation to inform the party to reject any or all the applications without assigning any reason.
- 7.2. Any effort on the part of the party or his agent to exercise influence or to pressurize the SNDT Women's University would result in rejection of his application. Canvassing of any kind is prohibited.
- 7.3. The party should disclose details of arbitration / litigation cases, if any, is pending or in progress. Hiding of such information would result in summarily rejection of his bid without assigning any reason.

# Form B

Form of Bankers' Certificate from a Scheduled Bank for Certifying the Solvency of the

	This is to certify that to the best of our knowledge and information that M/shaving marginally noted address, a customer of our bank are/is respectable and can be treated as good for any engagement upto a limit of
	<b>`</b>
	Rupees
	This certificate is issued without any guarantee or responsibility on the bank or any of the officers.
Date:	(Signature)  Authorized Bank Representative
Notes:	Bankers certificates should be on letter head of the Bank.

# No

In case of partnership firm, certificate should include names of all partners as 2 recorded with the Bank.

 $\frac{Form\ C}{Details\ of\ All\ Similar\ Works\ Completed\ During\ the\ Last\ Five\ (5)\ Years\ Ending\ 31th\ March\ 2016$ 

S. No	Name of work and locati on	Owne r/ Client	Cost of work in Lakhs of Rupee s	Date of commen cement as per contract	Stipulat ed date of complet ion	Actual date of complet ion	ion cases pending / in progres s with details	Name, address & phone number of contactabl e reference	Remarks
1	2	3	4	5	6	7	8	9	10
		l .	I	l	l .	l .	l .	l	

Form D

# **Projects Under Execution or Awarded**

S. No	Name of work and locati on	Owne r / Client	Cost of work in Lakhs	Date of commen cement as per contract	Stipulat ed date of complet ion	Upto date precent age of work complet	Slow progres s if any and reasons thereof	Name, address & phone number of contactabl e reference	Remarks
			Rupee s			е			
1	2	3	4	5	6	7	8	9	10

# Form E

# Performance Report of Works Referred to in Form B & Form C

1	Name of the work / project location	:
2	Agreement No.	:
3	Estimated Cost	:
4	Tendered Cost	:
5	Date of Start of Work	:
6	Date of Completion of Work	:
i	Stipulated Date od Completion	:
ii	Actual Date of Completion	:
7	Amount of compensation levied for	:
	delayed completion, if any	
8	Amount of reduced rate items, if any	:
9	Performance Report	:
i	Quality of Work	: Very Good / Good / Fair / Poor
ii	Financial Soundness	: Very Good / Good / Fair / Poor
iii	Technical Proficiency	: Very Good / Good / Fair / Poor
iv	Resourcefulness	: Very Good / Good / Fair / Poor
V	General Behaviour	: Very Good / Good / Fair / Poor

(Signature) Date: Authorized Client's Representative

#### **CONDITIONS OF CONTRACT**

**Clause 1:** The person/persons whose tender may be accepted (hereinafter called the contractor, which expression shall unless excluded by or repugnant to the contest include his heirs, executors, administrators, and assigns) shall (A) within 10 days (which may be extended by the University Engineer up to 15 days if the SNDT women's university thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the SNDT women's university in cash to the Registrar, SNDT women's university sum sufficient which will made up the full security deposit specified in the tender or (B) (Permit University at the time of making any payment to him for work done under the contract to deduct such as will amount to 2.5 percent of all moneys so payable such deductions to be held by University by way of security deposit.) Provided always that in the event of the contractor depositing a lumpsum by way of security deposit as contemplated at (A) above, then and in such case, if the sum so deposited shall not amount to 2.5 percent of total estimated cost of the work, it shall be lawful for University at the time of making any payment to the contractor for work done under the contract to make up the full amount to 2.5 percent by deducting a sufficient sum from every such payment at last aforesaid until the full amount of the security deposit is made up. All compensation or other sums of money payable by the contractor to University under the terms of his contract may be deducted from or paid by sale of sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due or may become due by University to the contractor under any other contract or transaction of any nature on any account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid, the contractor shall, within ten days thereafter, make good in cash or University securities endorsed and aforesaid any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof. The security deposit referred to, when paid in cash may, at the cost of the depositor, be converted into interest bearing securities provided that the depositor has expressly desired this in writing.

If the amount of the security deposit to be paid in a lump sum within the period specified at (A) above is not paid, the tender/contract already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts. The amount of the security deposit lodged by a contractor shall be refunded along with the payment of the final bill, if the date upto which the contractor has agreed to maintain the work in good order is over. If such date is not over, only 90% amount of security deposit shall be refunded along with the payment of the final bill. In the event of the contractor failing or neglecting to complete rectification work within the period upto which the contractor has agreed to maintain the work in good order , then , subject to provisions of clauses 17 and 20 hereof the amount of Security Deposit retained by University shall be adjusted towards the excess cost incurred by the department on rectification work.

Clause 2:- The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall through the stipulated period of the contract be proceeded with, all due diligence (time being deemed to the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one percent or such smaller amount as the University Engineer ( whose decision in writing shall be final ) may decide, of the amount of the estimated cost of the whole work as shown by the tenderer for every day that the work remains uncommenced, or unfinished , after the proper dates. And further to ensure good progress during execution of the work, the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month to complete.

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1/8 of the work in 1/4 * of the time 3/8 of the work in 1/2 ** of the time 3/4 of the work in 3/4 *** of the time Entire work in 1 month within time limit.
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\*\* **Note** – The quantity of the work to be done within a particular time to be specified above shall be fixed and inserted in the blank space kept for the purpose by the officer competent to accept the contract after taking in to consideration the circumstances of each case and abide by the programme of detailed progress laid down by the University Engineer.

The following proportion will usually be found suitable:- In 1/4, 1/2, 3/4, of the time.

Reasonable progress of earth work 1/6, 1/2,3/4, of the total value of the work to be done.

Reasonable progress of masonry work 1/10, 4/10, 8/10 of the total value of the work to be done.

In the event of the contractor failing to comply with this conditions shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the University Engineer (whose decision in writing shall be final) may decide of the said estimated cost of the whole work for every day that the due quantity of work remains incomplete provided always that the total amount of compensation to be paid under the provisions of this clause shall not exceed 10 percent of the Estimated cost of the work as shown in the tender. University Engineer should be the final authority in this respect.

<u>Clause3:-</u> In any case in which under any clause of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by installment or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause the University Engineer, on behalf of the

University shall have power to adopt any of the following courses, as he may deem suited in the interest of the University.

- **a)** To rescind the contract (for which rescission notice in writing to the contractor under the head of University Engineer shall be conclusive evidence) and in that case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of University.
- b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same rates as if it had been carried out by the Contractor under the terms of his contract. The certificate of the University Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.
- c) To order that the work of the contractor be measured upto and take such part thereof as shall be unexecuted, out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work-charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the University Engineer as to all, the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under clause (a) above the contractor shall not be entitled to recover or be paid, any sum for any work therefore actually performed by him under this contract unless and until the University Engineer shall have certified in writing the performance of the such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the Contractor, the amount of excess shall be deducted from money due to the contractor by University under the contract or otherwise howsoever, or from his security deposit or the sale proceeds thereof provided, however that the contractor shall have no claim against University, even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clause (a), (b) or (c) is adopted by the University Engineer, the contractor shall have no claim to compensation for

any loss sustained by him by reason of his having purchases or procured any materials, or entered into any engagement made any advances on account or with a view to the execution of work or the performance of the contract.

<u>Clause 4:-</u>If the progress of any particular portion of the work unsatisfactory, the University Engineer, shall notwithstanding, that the general progress of the work is in accordance with the conditions mentioned in clause 2, be entitled to take action and of clause 3(b) after giving the contractor 10 days notice in writing. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

Clause 5:-In any case in which any of the powers conferred upon the University Engineer by clause 3 and 4 hereof shall have become exercisable and the same shall not have been exercised, the non exercise thereof shall not constitute a waving of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor for which under any clause hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the University Engineer taking action under sub-clause (a) or (c) of clause 3, he may, if he so desires, take possession of all or any tools and plant, materials and stores in or upon the work of the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the University Engineer whose certificate thereof shall be final. In the alternative the University Engineer, may, after giving notice in writing to the contractor or his clerk of the work, foreman or other authorized agent require him to remove such tools and plants, materials, or stores from the premises within a time to be specified in such notice, and in the event of the contractor failing to comply with any such requisition, the University Engineer may remove them at the contractor's expense or sale them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of the University Engineer as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

Clause 6 – If the contractor shall desire an extension of the time for completion of work on the ground of his having been unavoidably hindered in its execution or on any other grounds he shall apply in writing to the University Engineer before expiration of the period stipulated in the tender or before the expiration of 30 days form the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, whichever is earlier and the University Engineer, or in the opinion of University Engineer, or Chief Engineer as the case may be if his opinion, there were reasonable grounds for granting an extension, grant such extension as he thinks necessary or proper. The decision of the University Engineer in this matter shall be final.

Clause 7:- On the completion of the work, the contractor shall be furnished with a certificate by the University Engineer (hereinafter called the Engineer-incharge) of such completion but no such certificate shall be given nor shall have the work be considered to the completed until the contractor shall have removed from the premises on which the work shall have been executed, all scaffolding, surplus materials and rubbish and shall have cleaned off, the dirt from all wood work, doors, windows, walls, floor or other parts of any building in or upon which the work has been executed or which he may have had possession for the purpose of executing the work, not until the work shall have been measured by the Engineer-in-charge or where the measurements have been taken by his subordinates until they have received approval from the Engineer-in-charge, the said measurements being binding and conclusive against contractor. If the contractor shall fail to comply with requirements of this clause as to the removal of scaffolding surplus materials and rubbish and the cleaning of dirt on or before the date fixed for the completion of the work the Engineerin-charge may at the expense of the contractor remove such scaffolding, surplus materials as aforesaid except for any sum actually realised by the sale thereof.

Clause 8:-No payment shall be made for any work estimated to cost less than rupees one thousand till after the whole of work shall have been completed and a certificate of completion given. But in the case of work estimated to cost more than rupees one thousand the contractor shall on submitting a monthly bill therefore, be entitled to receive payment proportionate to the part of the work then approved and passed by the Engineer-in-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actually done and completed and shall not preclude the Engineer-in-charge from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed or reelected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof if any respect or the occurring of any claim nor shall it conclude, determine or affect in any other way, the powers of Engineer-incharge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or effect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for the completion of the work, otherwise the Architect's certificate of the measurements and of the total amount payable for the work shall be final and binding on all the parties.

Clause 9:- The rates for several items of work estimated to cost more than Rs.1000/- agreed to within shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specification. In cases, where the items of work are not accepted as so completed by the Engineer-in-charge, he may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on account bills.

<u>Clause 10:</u>-A bill shall be submitted by the Contractor in each month or before the date fixed by the Engineer-in-charge for all work executed in the previous month, and the Engineer-in-charge shall take or cause to be taken the requisite

measurements for the purpose of having the same verified and the claim, so far as it is admissible, shall be adjusted, if possible, within ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may depute a subordinate to measure up the said work in the presence of the contractor or his duly authorized agent whose countersignature to the measurements list shall be sufficient warrant, and Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respects.

<u>Clause 11:-</u> The contractor shall submit all bills on the printed forms to be had on application at the office of the Engineer- in-charge. The charges to be made in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender at the rates hereinafter provided for such work.

Clause 12:- If the specification or estimate of the work provides for the use of any special description of material to be supplied from the stores of the Public Works Dept. store or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge (such material and stores and the prices to be charged therefore as hereinafter mentioned being so far as practicable for the convenience of the contractor but not so as in any way to control the meaning or effect of this contract specified in the schedule or memorandum hereto annexed) the contractor shall be supplied with such materials and stores as may be required from time to time to be used by him for the purpose of the contract only, and the value of the full quantity of the materials and stores so supplied shall be set off or deducted from any sums then due or thereafter to become due to the contractor under the contract, or otherwise, or from the security deposit or the proceeds of sale thereof, if the security deposit is held in University securities, the same or a sufficient portion thereof shall in that case be sold for the purpose. All materials supplied to the contractor shall remain the absolute property of University and shall on no account be removed from site of the work, and shall at all times be open for inspection by the Engineer-in-charge. Any such materials unused and in perfectly good condition shall be returned to the Public Works Departmental store if the Engineer-in-charge so requires by a notice in writing given under his hand but the contractor shall not be entitled to return any such materials except with consent of the Engineer-in-charge and he shall have no claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him or for any wastage in or damage to any such materials.

<u>Clause12(A):-</u> All stores of controlled materials such as cement, steel etc. to be supplied by University to the contractor should be kept by the contractor under lock and key and will be accessible for inspection by the University Engineer or his agent at all times.

Clause 13:- The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner, and both as regards materials and every other respect in strict accordance with specifications. The contractors shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer-in-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of the work during office hours. The contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost. Further copies of the contract drawings and working drawings if required by him, shall be supplied at the rate of Rs.5,000/- per set contract drawings and Rs.500/- per working drawing except where otherwise specified.

Clause 14:- The Engineer-in-charge shall have power to make any alteration in or additions to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by the Engineer-in-charge and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work, and at the same rates as are specified in the tender for main work, and if the additional and altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out at the rates entered in the Schedule of Rates of the Division or at the rates mutually agreed upon between the Engineer-in-charge and contractor, whichever are lower. If the additional or altered work for which no rate is entered in the schedule of rates of Division is ordered to be carried before the rates are agreed upon then the contractor shall within seven days of the date of receipt by him of the order to carry out the work inform the Engineer-in-charge of the rate which it is his intention to charge for such class of work. And if the Engineer-in-charge does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry out in such manner as he may consider advisable provided always that if the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been determined as lastly here in before mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rate or rates as shall be fixed by the Engineer-in-charge. In the event of dispute, the decision of the Building and Works committee will be final. Where, however, the work is to be executed according to the designs, drawings and specifications recommended by the contractor and accepted by the competent authority the alterations above referred to shall be within the scope of such designs drawings, and specifications appended to the tender.

The time limit for the completion of the work shall be extended in the proportion that the increase in its cost occasioned by, alterations or additions bears to the cost of the original contract work, and the certificate of the Engineer-in-Charge as to such proportion shall be conclusive.

#### **Clause 15:**

- 1) If at any time after the execution of the contract documents the Engineer-in-Charge shall for any reason what-so-ever (other than default on the part of the contractor for which he is entitled to rescind the contract) desire that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all, he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof, provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim for payment or compensation whatsoever by reason of or in pursuance of any notice aforesaid, on account of any suspension stoppage or curtailment except to the extent specified hereinafter.
- 2) Where the total suspension of the work ordered as aforesaid continued for a continuous period exceeding 90 days, the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving a 10 day's prior notice in writing to the Engineer, within 30 days of the expiry of the said period of the 90 days, of such intention and requiring the Engineer to record the final measurement of the work already done and to pay final bill. Upon giving such notice, the contractor shall be deemed to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer shall proceed to complete the measurements and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the contractor. Such payment shall not in any matter prejudice the right of the contractor to any further compensation under the remaining provision of the this clause.
- 3) Where the Engineer required the contractor to suspend the work for a period in a excess of 30 days at any time or 60 days in the aggregate, the contractor shall be entitled to apply to the Engineer within 30 days of resumption of work after such suspension for payment of compensations to the extent of pecuniary loss suffered by him in respect of working machinery remained idle on the site or on the account of his having and to pay the salary or wages of labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery

salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect or any suspension whatsoever occasioned unsatisfactory work or any other default on his part. The decision of the Engineer in this regard shall be final and conclusive against the contractor.

# 4) In the event of.....

- (i) Any total stoppage of work on notice from Engineer under Sub clause (i) in that behalf.
- (ii) Withdrawal by the contractor from the contractual obligations complete the remaining unexecuted work under sub clause (2) on account of continued suspension of work for a period exceeding 90 days

#### OR

- (III) Curtailment in the quantity of item or items originally tendered on account of any alteration, omission or substitution in the specifications, drawings, designs or instructions under clause (14) 1 where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25 percent at the rates for the item specified in the tender is more than Rs.5000/-
- **4-A)** It shall be open to the contractor, within 90 days from the service of (i) the notice of stoppage of work or (ii) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension of work or (iii) notice under clause 14(1) resulting in such curtailment to produce to the Engineer satisfactory documentary evidence that he had purchased or agreed to purchase material for use in the contracted work, before receipt by him of the notice of stoppage, suspension or curtailment and require the University to take over on payment of such material at the rates determined by the Engineer, provided, however, such rates shall in no case exceed the rates at which the same was acquired by the contractor. The University shall their after take over the material so offered, provided quantities offered are not in excess of the requirement of the unexecuted work as specified in the accepted tender and are of quality and specification approved by the Engineer.

<u>Clause 16:-</u>Under no circumstances whatever shall the contractor be entitled to any compensation from University on any account unless the contractor shall have submitted a claim in writing to the Engineer-in-charge within one month of the case of such occurring.

Clause 17:-If at any time before the security deposit or any part thereof is refunded to the contractor, it shall appear to the Engineer-in-charge or his subordinate in charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality, or that any materials or articles provided by him for the execution of the work are unsound, or of a quality inferior to that contracted for, or are otherwise

not in accordance with the contract, it shall be lawful for the Engineer-in-charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials or articles complained of many have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or if so required, shall remove the materials or articles so specified and provided other proper and suitable materials or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in the written intimation aforesaid the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding 10 days, during which the failure so continues and in the case of any such failure the Engineer-In-charge may rectify or remove and re-execute the work or remove, and replace the materials or articles complained of as the case may be at the risk and expense in all respects of the contractor. Should the Engineer-in-charge consider that any such inferior work or materials as described above may be accepted or made use of it shall be within his discretion to accept the same at such reduced rates as he may fixed therefore.

Clause 18:- All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his subordinates, and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinate to visit the work shall have been given to the contractor, either himself be present to receive orders and instructions or have responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's duly authorized agent shall be considered to have the some force and effect as if they had been given to the contractor himself.

Clause 19:-The contractor shall give not less than five days notice in writing to the Engineer-in-charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is so covered or placed beyond the reach of measurement and shall not cover-up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given consent obtained the same shall be uncovered at the contractor's expenses, and in default thereof, no payment or allowance shall be made for such work or for the materials with which the same was executed.

<u>Clause 20:</u> If during the period of **12 months** from the date of completion as certified by the Engineer-in-Charge pursuant to Clause-7 of the contract or months after commissioning the work, whichever is later in the opinion of the University Engineer, the said work is defective in any manner whatsoever, the

contractor shall forthwith on receipt of notice in that behalf from the University Engineer, duly commence execution and completely carry out at his cost in every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the University Engineer. In the event of the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefore in the said notice and/ or complete the same as aforesaid as required by the said notice, the University Engineer get the same executed and carried out departmentally or by any other agency at the risk on account and at cost of the contractor. The contractor shall forthwith on demand pay to the Govt., the amount of such costs, charges and expenses sustained or incurred by the University of which the certificate of the University Engineer shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of University, the same may be recovered from the contractor as arrears of land revenue. The University shall also be entitled to deduct the same from any amount which may then be payable or which may thereafter become payable by the University to the contractor either in respect of the said work or any other work whatsoever or from the amount of security deposit retained by University.

The contractor has to give 10 years guarantee of waterproofing treatment (Building work) on bond paper.

<u>Clause 21-</u> The contractor shall supply at his own cost all material (except such special materials if any as may in accordance with the contract, be supplied from the stores), plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works requisite or proper for the proper execution of the work, whether, in the original, altered or substituted form, and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-incharge as to which under these conditions he is entitled to be satisfied or which he is entitled to be required together with the carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or the failing which the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses of defense of every suit, action or other legal proceeding, that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damages and cost which may be awarded in any

such suit action or proceedings to any such person or which may with consent of the contractor be paid for compromising any claim by any such person.

List of machinery in contractor's possession and which they propose to use on the works should be submitted along with the tender.

- <u>Clause 21 A:-</u> The contractor shall provide suitable scaffolds and working platforms, gangways and stairways and shall comply with the following regulations in connections therewith.
- **a)** Suitable scaffolds shall be provided for workmen for all works that can not be safely done from a ladder or by other means.
- **b)** A scaffold shall not be constructed, taken down or substantially altered except.
  - **1)** Under the supervision of a competent and responsible person;
- **2) as** far as possible by competent workers possessing adequate experience in this kind of work.
- c) All scaffolds and appliances connected therewith and ladders shall.
  - 1) Be of sound material.
- **2)** Be of adequate strength having regard to the loads and strains to which they will be subjected and,
  - **3)** Be maintained in proper condition.
- **d)** Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use.
- **e)** Scaffolds shall not be over loaded and so far as practicable the load shall be evenly distributed.
- **f)** Before installing lifting gear on scaffolds, special precautions shall be taken to ensure the strength and stability of the scaffold.
- **g)** Scaffold shall be periodically inspected by the competent person.
- **h)** Before allowing a scaffold to be used by his workmen, the contractor shall, whether the scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations therein specified.
- i) Working platform, gangways stairways shall.
  - i) Be so constructed that no part thereof can sag unduly or unequally.
- **ii)** Be so constructed and maintained having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping,

- iii) Be kept free from any unnecessary obstruction.
- **j)** In the case of working platform, gangway, working places and stairways at a height exceeding three meters. (to be specified)
- i) Every working platform and every gangway shall be closely boarded unless other adequate measures are taken to ensure safety.
  - ii) Every working platform and gangway shall have adequate width and
- **iii)** Every working platform, gangway, working place and stairway shall be suitably fenced.
- **k)** Every opening in the floor of a building or in working platform shall except for the time and to the extent required to allow the excess of persons or the transport or shifting of materials be provided with suitable means to prevent the fall of persons or materials.
- **I)** When persons are employed on a roof where there is a danger of failing from a height exceeding 3 meters suitable precautions shall be taken to prevent the fall of persons or materials. ( to be prescribed).
- **m)** Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places.
- **n)** Safe means of access shall be provided to all working platforms and other working places.
- **o)** The contractor/(s) will have to make payments to the labours as per Minimum Wages Act 1948.
- <u>Clause 21 B</u>-The contractor shall comply with the following regulations as regards the Hoisting Appliances to be used by him:
- **a)** Hoisting Machine and tackle, including their attachments, anchorages and support shall
- i) Be of good mechanical construction, sound material and adequate strength and free from patent defect; and
  - ii) Be kept in good repair and in good working order.
- **b)** Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.
- **c)** Hoisting machine and tackle shall be examined and adequately tested after erection on the site and before use and be re-examined in position at intervals to be prescribed by the Engineer in Charge.

- **d)** Every chain, ring, hook, shackle, swivel and pulley block used, in hoisting or lowering materials or as a means of suspension shall be periodically examined.
- e) Every crane driver or hoisting appliances operator shall be properly qualified.
- **f)** No person who is below the age of eighteen (18) years shall be in control of any hosting machine, including any scaffold which, or give signals to the operator.
- **g)** In the case of every hoisting machine and of every chain, ring, hook, shackle, swivel pulley block used in hosting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means.
- **h)** Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load
- i) In the case of hoisting machine having a variable safe working load, each safe working, load and the conditions under which it is applicable shall be clearly indicated.
- j) No part of any hoisting machine or of any gear referred to in regulation (g) above shall be loaded beyond the safe working load except for the purpose of testing.
- **k)** Motors, gearing transmissions, electric writing and other dangerous part or hoisting appliances shall be provided with efficient safeguards.
- **l)** Hoisting appliances shall be provided with such means as will reduce to minimum the risk of the accidental descent of the load.
- **m)** Adequate precaution shall be taken to reduce to a minimum, the risk of any part of a suspended load becoming accidentally displaced.
- <u>Clause 22 –</u> The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from the University Engineer. When such permit is given, and also in all cases when destroying cut or drag trees brushwood, grass etc. By fire, the contractor shall take the necessary measure to prevent such fire spreading to or otherwise damaging surrounding property. The contractor shall make his own arrangements for drinking water for the labour employed by him and provide sanitary and other arrangements.
- <u>Clause 23</u>–Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of University property including any damage caused by spreading of fire mentioned in clause 22 shall be estimated by the Engineer-in-Charge or such other officer as he may appoint and the estimate of the Engineer-in-Charge subject to the decision of the

University Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which, the same will be recovered from the contractor as damages in the manner prescribed in the clause 1 or deducted by the Engineer-in-Charge from any sums that may be due or become due to the contractor under this contract or otherwise.

The contractor shall bear the expenses of defending any action or other legal proceeding that may be brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequences.

<u>Clause 24 -</u> The contractor shall employ the labours with the nearest Employment Exchange.

<u>Clause 25 -</u>Work shall be done on a Sunday with the sanction in writing of the Engineer-in-Charge.

<u>Clause 26 -</u> The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge and if the contractor shall assign or sublet his contract, or attempt to do so or become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors, or attempt to do so or if bribe, gratuity, gift loan, perquisite ,reward or advantage, pecuniary or otherwise shall either directly or indirectly be given, promised or offered by the Contractor or any of his servants or agents to any public officer or person in the employment of University in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineerin-Charge may thereupon by notice in writing rescind the contract, and the security deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of University, and the same consequences shall ensure as if the contract had been rescinded under Clause 3 thereof and in addition the Contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

<u>Clause 27:-</u> All sums payable by a contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of University without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

<u>Clause 28:</u> In the case of tender by partners, any change in the constitution of a firm shall be forthwith notified by the contractor to the Engineer-in-charge for his information.

<u>Clause 29:-</u>All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the University Engineer of the Circle, for the time being, who shall be entitled to direct, at what point or points and in what manner they are to be commenced, and from time to time carried on.

<u>Clause 30 (1) :-</u> Except where otherwise specified in the contract and subject to the powers delegated to him by University under the code, rules then in force, the decision of the Architect for the time being shall be final, conclusive, and binding on all parties of the contract upon all question relating to the meaning of the specification, design, drawing, & instructions, hereinbefore mentioned and as to the quality or workmanship, or materials used on the work, or relating to the contract, designs, drawings, specifications, estimates, instructions, orders, or these conditions, or otherwise concerning the works, or the execution, or failure to execute same whether arising, during the progress of the work, or after the completion or abandonment there of for the time being , shall be final conclusive binding on all parties to the contract.

Clause 30 (2):- All the disputes and differences of any kind whatever rising out of or in connection with the contract or in carrying out of the works (whether during the progress of the works or after their completion and whether before or after the determination, abandonment or breach of contract) shall be referred to by the Contractor or by the University's University Engineer of the University to the Sub committee of building and works Committee within 30 days from the date of receipt of the Decision of the Architect and the sub committee shall decide such dispute/difference as expeditiously as possible

<u>Clause 31:-</u> If the Contractor / the university is aggrieved by the decesion of the Sub – Committee , the Contractor / the University Engineer of the University may apply to Vice Chancellor of the University , within 30 days from the date of receipt of decision of the Subcommittee , for entering into the arbitration . On receipt of such application from the Contractor or University engineer of the University, the Vice- Chancellor of the University shall appoint a sole Arbitrator who will be a fellow of Indian Institute of Architect or Institute of Engineer (India) and after the dispute / difference to him. The decision of the Arbitrator shall be binding and final on the both the parties. The Provisions of Arbitration and Conciliation Act, 1996 shall apply to such arbitration. Such arbitration proceeding will be held at Mumbai.

<u>Clause 32:-</u> When the estimate on which a tender is made includes lump sums in respect of part of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for each item, or if the part of work in question is not in the opinion of the Engineer-in-Charge capable of measurement, the Engineer-in-Charge may as his discretion pay the lumpsum amount entered in the estimate and certificate in writing of the Engineer-in-

charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provision of this clause.

<u>Clause 33 :-</u> In the case of any class of work for which there is no such specification as is mentioned in rule 1 of form B-1, such work shall be carried out in accordance with the Divisional specifications, and in the event of there being no Divisional specifications, then in such case the work shall be carried out in all respects in accordance with all instructions and requirement of the Engineer-incharge.

<u>Clause 34:</u> The expression "works" or "work" where used in these conditions, shall unless there be something in the subject or context repugnant to such constructions, be construct, to mean the work or works contracted to be executed under or in virtue of the contract, whether temporary or permanent and whether original, altered, substituted or additional.

<u>Clause 35:</u> The percentage referred to in the tender shall be deducted from/ added to the gross amount of the bill before deducting the value of any stock issued.

<u>Clause 36:</u> All quarry fees, royalties, and ground rent for stacking materials, if any, should be paid by contractor.

Clause 37:-The Contractor shall be responsible for and shall pay any compensation to his workmen payable under the Workmen's Compensation act, 1923 (VIII of 1923), (hereinafter called the said Act) for injuries caused to the workmen, if such compensation is payable / paid by the University as principal under sub-section (1) of Section 12 of the said act on behalf of the Contractor, it shall be recoverable by the University from the Contractor under sub-section (2) of the said section. Such compensation shall be recovered in the manner laid down in Clause 1 above.

Clause 37(A):- The Contractor shall be responsible for and shall pay the expenses of providing medical aid to any workman who may suffer a bodily injury as a result of an accident. If such expenses are incurred by the University, the same shall be recoverable from the Contractor forthwith and be deducted without prejudice to any other remedy of the University from any amount due or that may become due to the Contractor.

<u>Clause 37 (B):-</u> the contractor shall provide all necessary personal safety equipment and first aid apparatus available for the use of the persons employed on the site and shall maintain the same in condition suitable for immediate use at any time shall comply with the following regulations in connection therewith.

**a)** The workers shall be required to use the equipments so provided by the Contractor and the Contractor shall take adequate steps to ensure proper use of the equipment by those concerned.

- **b)** When work is carried on in proximity to any place where there is a risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.
- **c)** Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- Clause 37 (C):- The Contractor shall duly comply with the provisions of "The Apprentices Act, 1961" (III of 1961). The rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so, he shall be subjected to all the liabilities and penalties provided by said Act and said Rules.
- <u>Clause 38:-</u>1) Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rates shall be permitted in respect of any of the items so long as, subject of any special provision contained in the specifications prescribing a different percentage of permissible variation in the quantity of the item does no exceed the tender quantity by more than 25 percent and so long as the value of the excess quantity beyond this limit at the rate of the item specified in the tender, is not more than RS. 5,000/-
- 2) The Contractor shall if ordered in writing by the Architect to do so, also carry out any quantities in excess of the limit mentioned above in sub clause (i) hereof on the same condition as and in accordance with the specifications in the tender and at the rates (i) derived from the rates entered in current schedule of rates and in the absence of such rates (ii) at the rates prevailing in the market. The said rates being increased or decreased as the case may be, by the percentage which the total tendered amount bears to the estimated cost of the works as put to tender based upon the schedule of rates applicable for the year in which the tenders were invited. (For the purpose of operation of this clause, this cost shall be worked out from the DSR prevailing at the time of acceptance of tender for Rs. 18,65,197.2/-In words Rs. (Eihteen lakh sixtyfive thousand one hundred ninety-seven only)
- **3)** Claims arising out of reduction in the tendered quantity of any item beyond 25% will be governed by the provision of clause 15 only when the amount of such reduction beyond 25 percent at the rate of the item specified in the tender is more that Rs.5000/-(Rupees Five Thousand only).
- **4)** This clause is not applicable to extra items.
- **5)** There is no change in the rate if the excess is more than 25% of the tendered quantity but the value of the excess work at the tendered rate does not exceed Rs. 5000/- (Rupees Five Thousand only).
- 6) The quantities to be paid at tendered rate shall include:-

- a) Tendered quantity plus
- b) 25% excess of the Tendered quantity or the excess quantity of the value of Rs.5000/- at the Tendered rates whichever is more.

<u>Clause 39:-</u> The contractor shall employ any famine, convict or other labour of a particular kind or class if ordered in writing to do so by the Engineer-in-Charge.

<u>Clause 40:-</u> No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance works, on account of any delay in accordance to sanction of estimates.

<u>Clause 41:-</u> No compensation shall be allowed for any delay in the execution of the work on account of water standing in borrow pits or compartments. The rates are inclusive for hard or cracked soil, excavation in mud, sub soil, water standing in borrow pits and no claim for an extra rate shall be entertained, unless otherwise expressly specified.

<u>Clause 42:-</u>The contractor shall not enter upon or commence any portion of work except with the written authority and instructions of Engineer-in-Charge or of his subordinate in charge of the work. Failing such authority, the contractor shall have no claim to ask for measurements of or payments for work.

<u>Clause 43 :-(i)</u> No contractor shall employ any person who is under the age of 18 years.

- (ii) No contractor shall employ donkeys or other animals with breaching of string or thin rope. The breaching must be at least three inches wide and should be of tape (Newer).
- (iii) No animal suffering from sores, lameness or emaciation or which is immature shall be employed on the work.
- **(iv)** The Engineer-in-Charge or his Agent is authorized to remove from the work, any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by the University for any Delay caused in the completion of the work by such removal.
- **(v)** The contractor shall pay fair and reasonable wages to the workmen employed by him in the contract undertaken by him. In the event of any dispute arising between the contractor and his workmen on the grounds that the wages paid are not fair and reasonable, the dispute shall be referred without delay to the University Engineer, who shall decide the same. The decision of the University Engineer shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions in the contract regarding the payment to be made by the University at the sanctioned tender rates.

(vi)Contractor shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban areas.

**(vii)** Contractor to take precaution against accidents which take place on account of labour using loose garments while working near machinery.

<u>Clause 44 :-</u> Payment to contractors shall be made by cheque drawn on any treasury within Mumbai convenient to them provided the amount exceeds Rs.10/-. Amounts not exceeding Rs.10/-. will be paid in cash.

<u>Clause 45:-</u>Any contractor who does not accept these conditions shall not be allowed to tender for work.

Clause 46:- If University declares a state of scarcity or famine to exist in any village situated within 10 miles of the work, the contractor shall employ upon such parts of the work, as are suitable for unskilled labour, any person certified to him by the University Engineer, or be any person to whom the University Engineer may have delegated this duty in writing to be in need of relief and shall be bound to pay to such person wages not below the minimum which University may have fixed in this behalf. Any disputes which may arise in connection with the Implementation of this clause shall be decided by the University Engineer whose decision shall be final and binding on the contractor.

Clause 47:- The price quoted by the contractors shall not in any case exceed the control price, if any, fixed by Government or reasonable price which it is permissible for him to charge a private purchaser for the same class and description, the controlled price or the price permissible under the provisions of Hoarding and Profiteering Prevention Ordinance, 1948 as amended from time to time. If the price quoted exceeds the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance, the contractor will specifically mention this fact in his tender along with the reasons for quoting such higher prices. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to conform with the controlled price as permissible under Hoarding & Profiteering Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the contractor.

<u>Clause 47 A:-</u> The tendered rates shall be inclusive of all taxes, rates and cesses.

<u>Clause 48:-</u> The rates to be quoted by the contractor must be inclusive of sales tax. No extra payment on this account will be made to the contractor.

<u>Clause 49:-</u> In case of materials that may remain surplus with the contractor from those issued for the work contracted for, the date of ascertainment of the

materials being surplus will be taken as the date of sale for the purpose of sales tax and the sales tax will be recovered on such sale.

<u>Clause 50:</u> The contractor shall employ the unskilled labour to be employed by him on the said work only from locally available Labours and shall give preference enrolled under Maharashtra University and Self Employment Departments Scheme. Provided, however, that if the required unskilled labour are not available locally, the contractor shall in the first instance employ such number of persons as is available and thereafter may with previous permission, in writing of the University Engineer-in-Charge of the said work, obtained the rest of requirements of unskilled the labour from outside the above scheme.

**Clause 51:-** Wages to be paid to the skilled and unskilled labourers engaged by the contractor.

The contractor shall pay the labourers skilled and unskilled according to the wages prescribed by the Minimum Wages Act of 1948 applicable to the area in which the work of the Contractor is in progress.

The Contractor shall comply with the provisions of the Apprentices Act, 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the University Engineer, may in his discretion may cancel the contract. The contractor shall also be liable, for any pecuniary liability arising out on account of any violation by him of the provision of the Act.

The contractor shall pay the labourers skilled and unskilled according to the wages prescribed by the Minimum Wages act of the 1948 applicable to the area in which the work is in progress.

Clause 52:- All accounts whatsoever which the contractor is liable to pay to the University in connection with execution of the work including the amount payable in respect of (i) materials/ and or stores supplied/issued hereunder by the University to contractor (ii) hire charges in respect of heavy plant, machinery and equipment given or hire by the University to the contractor for execution by him of the work and/or which advances have been given by the University to the contractor shall be deemed to be arrears of the Land Revenue and the University may without prejudice to any other rights and remedies of the University recover the same from the contractor as arrears of Land Revenue.

<u>Clause 53:-</u>The contractor shall duly comply with all the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 (37 of 1970) and the Maharashtra Contract Labour (Regulation and abolition) Rules, 1971 as amended from time to time and all other relevant statues and statutory provisions concerning payment of wages particularly to workmen employed by the contractor and working on the site of the work. In particular the contractor shall pay wages to each worker employed by him on the site of the work at the

rates prescribed under the Maharashtra Contract labour (Regulation and Abolition) Rules, 1971. If the contractor fails or neglects to pay wages at the said rates or makes short payments and the University makes such payment of wages in full or part thereof less paid by the Contractor as the case may be, the amount so paid by the University to such workers shall be deemed to be arrears of Land Revenue and the University shall be entitled to recover the same as such from the contractor or deduct same from the amount payable by the University to the contractor hereunder or from any other amount/s payable to him by the University.

<u>Clause 54 :-</u> The Contractor shall engage apprentices such as brick layer carpenter, wiremen, plumber, as well as blacksmith recommended by the State Apprenticeship Advisor Director of Technical Education, Dhobi Talao, Mumbai- 400 001 In the construction work. (As per Government of Maharashtra, Education Department No.TSA/5170/T/5689, dated, 7.7.72)

<u>Clause 55 :-</u> ( Government of Maharashtra P.W.D. Resolution No. CAT/1086/CR-243/K/Bldg.2, Mantralaya, Mumbai Dt. 11.8.1987)

#### CONDITIONS FOR MALARIA ERADICATION

# ANTI MALARIA AND OTHER HEALTH MEASURES

- **a)** The anti-malaria and other health measures shall be as directed by the Joint Director (Malaria and Filarial) of Health Services, Mumbai.
- **b)** The contractor shall see that mosquito-genic conditions are not created so as keep vector population to minimum level.
- **c)** The Contractor shall carry out anti –malaria measures in the area as per guidelines prescribed under National Malaria Eradication Programme and as directed by the Joint Director (Malaria and Filarial) of Health Services, Mumbai.
- **d)** In case of default in caring out prescribed anti-malaria measures resulting in increase in malaria incidence, contractor shall be liable to pay to University the amount spent by the University on anti-malaria measures to control the situation in addition to fine.

#### e) RELATION WITH PUBLIC AUTHORITIES.

The contractor shall make sufficient arrangements for draining away the sewerage water as well as water coming from the bathing and washing places and shall dispose off this water in such a way as not to cause any nuisance. He shall also keep the premises clean by employing sufficient number of sweepers. The contractor shall comply with rules, regulations, bye-laws and directions given from time to time by any local or public authority in connection with this

work and shall pay fees or charges which are livable on him without any extra cost to University.

#### Clause 56:- CONDITION RELATING TO INSURANCE OF CONTRACT WORK.

Contractor shall take out necessary Insurance Policy/ (viz. Contractors All Risks Insurance Policy, Erection All Risks Insurance Policy etc. as decided by the Directorate of Insurance) so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period compulsorily from the "Directorate of Insurance, Maharashtra State, Mumbai only its postal address for Correspondence is "264, MHADA, First Floor, Opp. Kalanagar, Bandra (East) Mumbai - 400051" (Telephone Nos. 26590403/26590690 and Fax No. 26592461/26590403) Similarly, all workmen's appointed to complete the contract work are required to insure under workmen's compensation insurance policy. Insurance policy/policies taken out from any other Company will not be accepted. If any contractor has effected Insurance with any insurance company the same will not be accepted and the amount of premium calculated by the Government Insurance Fund will be recovered directly from the amount payable to the Contractor for the executed contract work and paid to the Directorate of Insurance Fund, Maharashtra State, Mumbai, The Director of Insurance reserves the right to distribute the risks of insurance among the other insurers.

<u>Clause 57:-</u>BUILDING AND OTHER CONSTRUCTION WELFARE CESS: (Deleted) Building and other construction worker welfare cess at 1% or at the rates awarded from time to time as intimated by the competent authority of building and other construction worker welfare Act 1996 shall be deducted from bill amount. Whether bill advance payment or secured advance.

<u>Clause 58:-</u>Goods and Services Tax will be recovered from the bill of the contractor as per GST Act.

#### **SPECIAL CONDITIONS OF CONTRACT**

Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai.

#### **Definitions:**

OWNER / CLIENT will mean	SNDT Women's University or its authorised	
OWNER / CEIENT WITHCAN	representative.	
CONTRACTOR will mean	M/s	
CONSULTANT will mean	Any Specialist CONSULTANT appointed by the	
	OWNER/ ARCHITECT to design specialised part	
	of the Project and supervise quality of the same.	
MILESTONE will mean	Established progress completion dates set forth.	
CONTRACT SCHEDULE will mean	Time schedule agreed by the parties for the	
CONTRACT SCHEDULE WIII IIIeali	completion of project.	

# 1. Scope of Work

The detailed scope of work is **Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai.** Time of execution of work will **be 75 days.** 

#### 2. General

Contractor shall read and study the following conditions carefully, quote his rates and execute the work accordingly. Conditions mentioned herein shall override any condition mentioned anywhere in the contract.

The tender drawings are meant for guidance only and may not represent the exact size and shape of the building. However they will give a fair idea of the work involved. The contractor shall verify the dimensions given in the drawings before starting the work and point out discrepancies, if any.

It is understood that the Contractor has experience in executing similar works and has competence and commensurate technical expertise to carry out work with good engineering practice.

Attention of the Contractor is drawn to the fact that since this is a repair work of an existing old building, he shall take utmost precaution to cover carefully the existing structures and/or Client's property for dust control. He shall take suitable precautions so as to avoid any hindrance in conducting regular activities of Clients. No extra time and price will be allowed to Contractor for inconvenience or delays caused on this account.

Contractor shall also take safety precautions to protect injury to Client's staff, students and employees as well as general public.

The work will be carried out in phases, as per the Client's convenience, and no extra time and price will be allowed to the Contractor for the same.

#### 3. Site Conditions

The Contractor shall be solely responsible for satisfying himself concerning the nature of work, site conditions, local conditions including but not limited to the following:

- a. The site, its conditions, its geographical conditions, its topography, its access, **space available** for storing materials (which is limited to a great extent), etc.
- b. Local conditions, rules regulations, etc., and any such things required to be known for fulfilment of this contract.
- c. Attention of the Contractor is drawn to the fact that the work will be executed in the campus, which will be working at all times, and therefore the existing facilities have to be protected from disturbance from noise / movement of workers, material movement, etc. Safety norms will have to be observed strictly.
- d. <u>Contractor should satisfy himself about the working hours possible for construction under this contract. Contractor shall also ensure that day to day working of the campus shall not be hampered.</u>

The Contractor shall draw his own conclusions after examination of the above conditions. The failure on the part of the Contractor will not relieve him of his responsibilities, for not properly estimating the time and price, required for successful performance of the contract. Neither the Architect nor the Owner assumes any responsibility whatsoever in respect of sufficiency or accuracy of the information, records, reports investigations or claim that the information available is true representation of the actual conditions.

## 4. Cleaning

Contractor shall, at all times, keep the site safe, clean and tidy. As the work is to be executed in a functional campus, the Contractor shall protect Client's material and not allow dirt and dust to accumulate and spread in the premises and other area. The site has to be maintained clean at all times. Client reserves right to keep the site clean at Contractor's expense, if required.

When the work is nearing completion, he shall clear the site by removing the temporary structures, his surplus materials, debris, and equipment to any nearby place at his cost for remaining part of work.

Upon completion of work, the Contractor shall, at his expense, leave the premises in a clean neat and safe condition.

## 5. Water and Electricity for Construction

Contractor will make his own arrangement for water and its distribution as Clients/Owners will not provide the same.

The Client/Owner shall provide electricity at a single point near the construction site. Further distribution of water and electrical power shall be in the scope of the Contractor. For providing the electrical connection, 1% of the cost of work including all materials will be deducted from every bill of the Contractor.

For meeting the emergency requirement, (in event of failure/unavailability of regular electrical supply), the Contractor may have to get D.G. set as standby so that the work is not hampered due to unavailability of power.

## 6. Site Office, Cement Godown, Labour Camp, etc.

- 1.1. Contractor shall not be given space by the Client/Owner for his office unless specifically agreed by them in writing. Contractor shall check with Owner about the space required by him for his site office, before quoting for the work.
- 1.2. <u>Cement Godown</u>: The Contractor shall construct a sound, secure, water-tight Godown sufficient for storing cement (approximately 1000 bags at any time), before starting the construction work, at his own cost. Contractor shall check with Owner if such space is available.
- 1.3. <u>Labour Camps</u>: The Contractor shall not be given space to put up labour camps.
- 1.4. The Contractor shall make adequate sanitary arrangements for the staff and workers, which shall conform to the rules and regulations of SNDT and the local authorities.

# 7. Independent and Experienced Contractor

The Contractor shall work as an independent Contractor and not agent of Owner, Architect or any of the Consultants appointed for the project.

The Contractor represents that he is fully experienced, properly qualified, registered, licensed, equipped, organised and financed to perform the works under this contract. The Contractor represents that he understands the specifications, nature and present scope of work and claims that he has carried out similar work and worked under similar specifications and he is conversant with good engineering practices involved in civil construction. The Contractor promises to execute the work in a professional manner in the given time frame and as per good engineering practice and will hand over the project in trouble-free condition, even at times by suggesting additional specifications, (at extra cost) if the need arises.

Attention of the Contractor is drawn to the fact that the Contractor has to guarantee to the performance of each item of work mentioned in the B.O.Q. of this contract. The building will not have any construction defect left after the building is handed back to the Owners.

The Contractor shall test and verify accuracy, strength, reliability of his materials, equipment, systems used to carry out work and he will be solely responsible for its performance, safety while executing the performance and he will indemnify Owners, Architects and Consultants of

any damages or consequential damages in case of its failure for any performance-based specifications. Approval from the Owners, Architects or his Consultants to design, specifications of his equipment, will not absolve Contractor from his sole responsibility and obligations which have to be met solely by him.

# 8. Authorized Representative

Before starting the work the Contractor shall appoint and inform the Architect in writing the name of the authorised representative who will represent him and is empowered to take the decisions on behalf of the Contractor and the limitations of the representatives. If the work is suspended, he shall be available for discussions at all times with Architect. All the communications made with the authorised representative will be binding on the Contractor. Any change in the authorised representative will be informed to the Architect sufficiently in advance. All the correspondence regarding the CONTRACT will be addressed and sent to the Architect, unless otherwise informed.

#### 9. Contractor's Staff

Contractor shall appoint full-time experienced engineers, supervisors, etc., in the different fields of engineering and who have sufficient previous experience of similar nature of work. Contractor shall inform Architects and convince him about adequacy of his staff. He will have to appoint additional staff, if in the opinion of the Architect it is necessary to do so in the interest of work. Such staff shall not be removed unless alternative arrangements are made for replacement and only after informing the Architect.

Contractor shall get his sub-Contractors approved from the Architect and/or Consultant before they are allowed to work at site.

## 10. Order of preference

Unless otherwise specified, in case of discrepancy in the contract documents, the contract conditions will be applicable in following order.

- 1. Special Conditions of Contract
- 2. Drawings
- 3. Bill of Quantities (Schedule of works)
- 4. General Specifications
- 5. General Conditions of contract
- 6. Articles of Agreement of **INDIAN INSTITUTE OF ARCHITECTS.**

In case of discrepancy between wording of the General Specifications and that of Schedule of Quantities the wording of the Schedule of Quantities will have precedence over the wording of specifications.

Large-sized details will take precedence over small-sized details.

Architectural drawings will take precedence over Consultant's drawings.

# 11. Applicable Laws, Rules and Regulations

Contractor shall be responsible to comply with regulations of the local authorities & all applicable laws of Government of India, State, at which the site is situated and the state in which contract is signed, in effect the time of the duration of contract will apply to the contract and the Contractor.

In case of any discrepancy in the contract, the law of the country will prevail.

If any law is changed during the performance of the contract, and which has an effect on the performance and price of the contract, the same shall be brought to the notice of Owner and Architect. In such a case an equitable solution should be found within one month of the time it was brought to the attention of the Owner, in writing.

Contractor shall comply with the instructions of Architect and maintain all books; registers, challans, bills and documents related to work and maintain the records applicable under any law of local-authority, state-govt. Or central-govt. Or the general norms followed for the similar contract.

Owners have the right to deny access to any worker, staff or Contractor's representative by giving the Contractor a written notice, in case any default on their part in complying the provisions of contract or any law.

Contractor will perform all his obligations applicable under the labour laws which are applicable for the work to be performed under this contract. The copies of all the licences/documents required under the laws shall be maintained by the Contractor at site and a copy of the same will be given to the Owner.

Due to the omission on the part of the Contractor, if the Owner is liable to pay to the Government agency, under any provisions of the applicable laws in force at the time of signing the contract, the Owner will make such payment without referring to the Contractor. Such amount will be deducted from the amount due to the Contractor.

#### 12. Permits

Except as otherwise specified, the Contractor shall procure and pay for all permits, licenses, certifications and other applicable governing authority requirements and inspections, other than inspections performed by Architect or Owner and shall furnish any documentation, bounds, security or deposits required to permit performance of the work.

This clause does not cover payments made to statutory authorities for Building permits / sanctioning of plans, etc.

## 13. Security

The Contractor shall provide identity cards to his workers and his staff with their photographs and names written on it. It will be necessary to get records of staff and workers checked from local police station as the site is a university for women.

The Contractor shall make his own security arrangements of work in progress, equipment at site, materials received (including those supplied by Owner, if any) at site.

As the site is situated in the existing working campus of the Owner, the Contractor shall take proper precautions and ensure that no one:

- a. Damages Owner's property by the actions of his workers and staff.
- b. Enters in their premises.
- c. Interferes or obstructs the use of their premises.
- d. Obstructs the access to their premises.
- e. Uses their facilities.

The Contractor shall comply with the Owner's security requirements for the work site. Such compliance will not be limited to the above and will not relieve the Contractor of his obligation for maintaining proper security nor will it relieve him of his responsibility to establish and maintain secured conditions at the work site.

## 14. Tender drawings

The tender drawings are meant for guidance only and may not represent exact size and shape but will give a fair idea of the work involved. Complete list of tender drawings available for inspection is given elsewhere in the tender

Contractor shall examine the relevant tender drawings (which shall be issued along with the tender documents) and specifications of work. No claims shall be entertained for the assumptions made by the Contractor, if any. Contractor shall not write any comments/conditions/figures or change the tender by writing on the same in any manner.

In case price of item is quoted as lump sum item in the B.O.Q. the work described in the tender drawings will be added to the work described in the item of work in the schedule as if it is included in the scope of work where lump sum price is quoted. No extra payment will be made for the work shown in the tender drawings.

## 15. Shop drawings, Data, Samples & Reports

It is clearly understood that shop drawings are prepared by the Contractor. Architect/Consultant giving approval of shop drawings, and samples, and permission to proceed with the work does not constitute acceptance to design, method of working, testing or certificates submitted by the Contractor and does not relieve him of his responsibility of his contractual obligations.

## 15.1 Shop drawings

Shop drawings shall be submitted under following cases whichever is applicable.

- a) All specialised items for which the Contractor draws the specifications.
- Large-scale drawings showing fixing details of fixers, equipment and showing coordination with other services.
- c) Showing any changes in layout in the Consultant's drawings.
- d) Equipment layout, ducting, piping and wiring diagram.
- e) Manufacturer or Contractor's fabrication drawings for any materials or equipment supplied by him.

The Architect will give the Contractor design drawings of various parts and sections of the project. These drawings will give all the information to the Contractor to prepare shop drawing for the work. The Contractor shall check immediately the specifications and compared the same with the drawings. He will also check whether all the information required is available in the drawing and if any discrepancy, if exists should be pointed out to Architect/Consultant, in writing.

Based on the design drawings, the Contractor shall prepare and submit **four copies** of the shop drawings to Architect for himself and/or to his consultants.

The shop drawings shall be submitted at the Mumbai office of the Architect/Consultant. Contractor shall also submit all the required information/calculations along with the shop drawings. In case of incorrect information/discrepancy, Contractor shall arrange to depute a competent person to the Architect/Consultant's Mumbai office to explain/clarify the details in the shop drawings. Under no circumstances the distance between site of work and the Architect's office, the expenses involved in deputing a person or the extra time required will be entertained as an excuse to condone the preparation of shop drawings.

The Contractor shall submit four copies of catalogues, manufacturer's drawings, equipment characteristics data or performance charts as required by the Architect/Consultant.

Architect/Consultant will send two copies of the approved drawings to the contractor with any one of the following comments:

- i. Approved for Construction (AFC)
- ii. Approved as noted (AAN)
- iii. Rejected and to be revised 'or' Revise and Resubmit (RAR).

However, the Contractor shall not carry out the work unless he receives the design and/or shop drawing with a stamp of Approved for Construction.

Such Approved for Construction (AFC) drawings will form part of the contract and if there is any change in the original specification as a result of AFC drawings such change should be brought to the notice of Architect / Owner and change order is to be made before such item is executed.

Any variation between AFC drawings, Good for Construction (GFC) drawings and tender drawing will not make the contract void and the Contractor cannot refuse to carry out the work as per AFC drawings.

# 15.2 Samples

The Contractor shall submit the samples of finishing items as instructed by the Consultant/Architect for his approval. The samples shall be submitted in triplicate. Each sample will have Project Name and Item number of the contract, Manufacturer's name, etc. Rejected samples should be immediately removed from site.

Out of three approved samples, one sample will remain with the Architect and one will be displayed at site on Sample board. Only the approved sample shall be kept at site. The materials used in the work shall strictly conform to the approved sample.

Contractor should obtain approval for material which is not specified and quote rate as per best material available in market. Substandard material will not be allow to use in any stage of work and if found so the university will take prompt action against contractor.

## 15.3 List of Approved Makes

As far as possible Contractor shall use the materials, for construction, specified in the **LIST OF APPROVED MAKES**. In case of discrepancy/doubt regarding the materials being not specified clearly, the Contractor shall take prior approval from Architect before using such materials. In no case shall non-IS specified materials be used for construction/execution.

#### 15.4 Reports and Review Meetings

The Contractor shall submit <u>3 copies</u> each of the following reports:

No.	Report	Duration
1.	Quality Control	Whenever requested
2.	Progress Report and comparison with approved schedule, information required and reasons for delay, if any.	Every two weeks

The reports mentioned above shall include the following information:

# Fortnightly Progress Reports

The Contractor shall submit on first day of each month an updated <u>M.S. PROJECT</u> report showing the actual rate of progress till that day. The report will include 2 copies of photographs, with the date on which it is taken, of post card size for work in progress, as directed by Architect. In the event of actual rate of progress falls behind the scheduled progress as indicated

in the bar chart the Contractor shall accelerate the works within next 7 days so as to make up the lost works and time within  $15^{th}$  of each month to the satisfaction of the Architect.

The monthly report shall also include resource planning for the next month and also the expected value of the next month's R.A. bill.

#### Site Register

The Contractor shall maintain at the site, a diary showing an accurate record of the progress of the works, item-wise the number of men employed under each trade, plant and equipment operating at site. Reasons for stoppage of work will also be noted in the register.

## **Review Meetings**

A senior representative of the Contractor (Senior than the Site Manager) shall attend weekly review meetings at the work site. The Contractor shall give the list of information required by him, in writing, to the Architect well in advance. In addition, co-ordination meetings shall be called monthly or fortnightly, as the need be. The meeting will be attended by the Owner/Owner's representative, Consultants, Architect and the Contractor (partner/chief executive) to review the progress of work and sort out problems, if any, with an idea of ensuring the completion of the project within the stipulated time period.

## 16. Specifications

Entire work shall be as per specifications given in the tender, which will be taken as minimum specifications and as per relevant specifications of INDIAN STANDARD SPECIFICATION in case the specifications are not given in the contract.

Contractor shall inform Architect about deficiency in specifications, if any, at the time of submitting the tender and get the clarifications about the specifications. In case of deficient specifications found by the Contractor, affecting his performance guarantee, he must suggest his specifications at the time of finalising the contract and settle the revision in the rates quoted by him in the tender.

At no time the Contractor shall give excuse of defective/inadequate specifications for not providing the building which is free from defects and will be responsible for the quality of work executed by him.

## 17. Right to delete part of work

The Architect have the right, at their discretion, to add or delete any item in part or full and/or to alter any drawings and the Contractor shall not be entitled for any compensation for such commission. However, the Owner cannot award such work, omitted from the Contractor's agreed scope of work, to another agency without permission of the Contractor. However, in the opinion of Architect, if the quality of the work executed by the Contractor is not satisfactory, the Architect will have authority to get the same work done by any agency of his choice at the

expense of Contractor. The Architect's decision in this regard will be final, binding on the Contractor and without appeal.

In case of any of the items in the scope of this tender are given to any agency for execution, because of Contractor's inability to perform the work in a manner acceptable to Architect, and if the agency claims extra amount due to extra work necessary to be re-done because of the main Contractor's defective workmanship, all such extra amounts claimed by that agency, will be deducted from the main Contractor's dues. Or if, there are no dues to the main Contractor, this extra amount will be deducted from his retention money.

## 18. Good for Construction (GFC) or Approved for Construction (AFC) Drawings

Contractor shall indicate the dates on which he requires drawings before starting the work. Contractor shall give a notice of 15 days to Architect / Consultant about the requirement of the drawing/decisions required by him to complete the project as per schedule. It is understood that all the drawings are not required at the beginning of the project for completing the project on time.

Consultant shall forward the drawings to the Contractor. Contractor shall, immediately on receipt of 'GOOD FOR CONSTRUCTION' (GFC) drawings, check all specifications (technical specifications and pay item specifications/description) and GFC drawings and shall promptly (within a maximum time limit of three weeks) notify in writing to the Architect of any such omissions or discrepancies in such specifications or drawings.

Any claim/claims, which may result due to non-compliance of the above, shall not be entertained and work, shall be executed/completed at the cost and consequence of the Contractor.

Contractor shall call for the missing information/drawings from the Consultants in the prescribed form (Request for Information (RFI)) only. Contractor shall give a time of 10 days to supply such necessary information required by him. Without specific request from the Contractor, about information required, it will be construed that all the information is available with the Contractor.

Any delay in giving drawings/decisions/approval of samples shall be recorded by the Contractor and specific extension of time to complete the contract shall be given against such delays to the Contractor for completing the project. At the end of each month Contractor shall inform Owner/Architect about such cumulative delays affecting the schedule and obtain confirmation about the same. In the absence of such confirmation from time to time, Contractor's claim for extension of time will not be granted.

The Architect / Consultant will grant suitable extension in time if there is delay of supplying the information than specified above.

The decision of the Architect / Consultant on the extension of time is binding on the Contractor and will be outside the purview of arbitration

#### 19. Contract Schedule & Mile Stones

# 19.1 Time and Starting Date

No extension of time will be allowed due to change in quantity within the limits specified elsewhere in the contract unless satisfactory justification is given to the abnormal increase in the quantity affecting schedule of work.

Site shall be considered as handed over to the Contractor on the date of letter of intent though Contractor shall not have any **lien** on the site.

Contractor shall be given 7 days from and including the date on the letter of intent to start work and time period will be calculated from the 8th day from and including date on which letter of intent was handed to the Contractor.

#### 19.2 Milestones

Contractor Should submit the Milestones and should stick with these milestone by without hampering Quality of Work.

#### 19.3 Contract Schedule

Within 7 days of the issue of letter of intent/work order, Contractor shall prepare bar chart on **M. S. PROJECT ONLY showing linking of each activity and critical path** and finalise the same in consultation with Architect before mobilisation advance is paid to the Contractor. This bar chart will also indicate inputs from Architect and Owner. The bar chart shall include procurement of materials, approval of samples, drawing requirements along with proper linkages. The bar chart should include and confirm the milestones to be achieved as mentioned in the contract elsewhere.

Not submitting the bar chart in appropriate form could lead to delay in payment of mobilisation advance. The Contractor will not be eligible to claim extension of time or damages in any form if the delay in payment of mobilisation advances due to above reason.

Contractor shall carry out work as per bar chart.

If at any time the Contractor's actual progress does not conform to milestones mentioned in clause 20.2 above, the Owner/Architect will notify the Contractor to improve upon his progress. The Contractor upon such notification must improve his labour, number of shifts, material position, and equipment, etc., without additional cost to the Owner. Failure to issue such notice will not relieve Contractor of his obligation to achieve the necessary progress and milestones. Failure to act on the notice of Owner/Architect shall be sufficient grounds for termination of the contract.

Owners have the right to terminate the contract, without prejudice to the other rights and compensations to be recovered from the Contractor and without any compensation payable to the Contractor, if Contractor fails to achieve the milestones as agreed by both parties. Under the circumstance Contractor shall vacate the site within one month of such termination notice.

#### 20. Termination

Owner reserves the right to terminate the contract at intermediate stage and charge the Contractor liquidated damages at the agreed rate in case

- Contractor fails to execute the project as per agreed milestones,
- Architect feels that Contractor will not be able to complete the work as per schedule.
- ➤ Persistent default in quality of work not as specified and not acceptable to the Architect/Consultant.

No compensation will be granted for such termination of the contract. Contractor shall prepare his final bill within one month of notice of such termination of work is given to him. Contractor shall not prevent another Contractor from moving on to site after such notice is given. Owner shall settle Contractor's bill within 45 days including time required for certifying the bill. Any additional time in settling the bill will attract interest burden at the rate of 12% per annum on the net amount due to the Contractor, as per certificate of Architect.

## 21. Performance Bond-cum-Security Deposit

Successful Contractor, within 7 days of letter of intent, shall submit irrevocable and unconditional security Bank Guarantee for 5% of contract value in the approved form, towards the guarantee of successful completion of contract as per specifications and time.

This guarantee shall be valid from the date of letter of intent till 90 days after final completion date of project.

This guarantee will be released after ascertaining that there is no claim against the Owner and/or Contractor from any party and after ascertaining that Owner has no claim on the Contractor.

This deposit shall be forfeited if Contractor refuses or fails to complete the project as per terms of the contract.

## 22. Finance and Payments

#### 22.1 Mobilization Advance

Mobilization Advance and material advance shall be paid if University higher authority feels so. To obtain advance Contractor has to submit request letter. The request letter should not be considered as a confirmation of payment, rights of such payments reserved by the university.

Contractor should not stop work because of non payment of advance he must have arrange sufficient funds to start the work.

#### 22.2 Secured Advance

No secured advance shall be paid.

# 23. Bills and Procedure for payments

Following procedure for measurement of quantities, certification of bills and issue of certificate of payments shall be followed.

Contractor will make one bill in a month.

- i. The Contractor will take joint measurements of work done with clerk of works up to  $25^{\rm th}$  of each month in triplicate book.
- ii. Owner's representative (Site Engineer) and Contractor will sign such joint measurements.
- iii. Owner's representative will record any dispute in measurements, in a separate sheet.
- iv. Any work, not fully completed, as per schedule of work, will not be measured. Part rate giving recommendation of percentage of completed work e.g. door fixing without hardware or paint, etc. will not be paid.
  - One copy of corrected measurement sheets and the bill is to be given to Owner's representative for records.
  - Three copies of corrected measurement sheets are to be handed over to the Owner's representative to forward to Architect/Consultants along with three copies of the bill.
  - One copy of corrected measurement sheets is to be forwarded to Owner along with bill.
  - One copy of corrected measurement sheets and the bill is to be retained by the Contractor.
- v. Contractor must make a bill after measurements are checked and submit the bill to the Consultant for certification.
- vi. Contractor shall submit following with the bill.
  - 1. Soft copy of his bill in excel format.
  - 2. Measurement sheets duly signed by Owner's representative.
  - 3. Challans /Invoices of materials signed by Owner's representative.
  - 4. Summary sheet in a Performa similar to Certificate of Payments as issued and directed by Architect.

- vii. Architect/Consultant shall issue certificate of payment without cost of extra items, which have not already been settled in the previous bill within ten days of submission of bill as stated above. Two copies of the bill (including measurement sheets) will be returned to the Client who will retain one copy and forward one copy to the Contractor.
- viii. Extra items will be scrutinised and paid only after Architect and owner approves the rates. Contractor should note that there would be inherent delay in certifying the cost of extra items if the relevant documents are not presented with the analysis of extra item.
  - ix. Extra item, once certified, will be treated like normal percentage rates.
  - x. Owner shall make payments as per the certificate of payment within 15 working days of submitting the certificate to them. (100 % payment for tender (settled items) in each R.A. bill shall be released).
  - xi. The quality of the work shall be certified by Architect. Architect withholds the right to deduct reasonable money/or not pay for the defective /substandard quality of work, which cannot be dismantled, removed for bad workmanship.
- xii. Giving interim certificate of payment does not mean that the quantity of work has been accepted. Architect, if disapproves the quality, the amount of the certified/paid will be recovered in the next certificate/s.
- xiii. Escalation in contract rates will be considered if applicable due to increase in direct taxes; the same can be claimed in a separate bill for which separate certificate will be issued.
- xiv. Contractor should raise his claims, if any, in every running bill. Claims raised after two months after they are due will not be considered.

Any amount, which may be otherwise payable, may be withheld in whole or part if Owner files any claim on Contractor.

Contractor is in default on any of the contract conditions including but not limited to safety, quality, time schedule, insurance, and adjustments due to over payment from previous bills, payments if not made by the Contractor to the nominated sub-Contractor after he receives payment from the Owner.

After withholding such payments as per the reasons stated above, the Owner will make payment to the Contractor, the amount certified by Architect/Consultant after deducting taxes as per law of the country.

If claims are filed against the Contractor connected with this contract in which Owner will be held liable, if unpaid, the Owner may deduct all such expenses required to pay and/or defend the claim from the amount due to the Contractor and if the money is insufficient from the bills, the same will be deducted /withheld from the performance guarantee given by the Contractor.

#### 24. Rates

All rates will be inclusive of cost of cement and steel.

No escalation shall be allowed in prices during the tenure of the contract

The tender is an Percentage rate tender. If the rate of any item is on lump sum basis, the work involved in the item will be taken as that described in the item together with what is shown in the tender drawings.

The rates quoted by the Contractor shall include charges for royalty, LBT, excise sales tax, levies of local-authority, state-govt.& central-govt. and any other taxes as applicable and constituted by law INCLUDING works contract tax/Contract VAT as well as SERVICE tax.

However the Contract, VAT and Service Tax on the Bill amount will be shown separately.

In case contractor provides other services which have not been covered under the Architects' scope of services and also which categorise as consultancy services then the component of service tax will be shown and be paid separately.

Rates quoted in schedule of works are to be full and inclusive of the works described in the item together with other associated items such as general risk, liabilities and obligations, construction of temporary stores, watching, lighting the area, insurance of men and materials and other insurance mentioned elsewhere in the tender, cleaning the site before and after completion of work, etc.

Rates quoted for same items for different building/works shall remain same. In case Contractor quotes different rates for same item the lowest of all the rates shall be made applicable for that item.

#### 25. Rates of extra items

All the extra percentage rates will be settled by the Architect (before starting the work), whose decision will be final in this regard, by deriving them from similar items already quoted in the tender. In case this is not possible, the extra percentage rates shall be calculated as per the cost of the materials (including taxes and transport and wastage) plus cost of labour plus 20% of cost of materials and labour to cover his overheads and profits. The Architect's decisions in settling the rates of extra items shall be final and binding on the Contractor.

The Contractor shall furnish, on request from the Architect all documents required to justify his claim of rates of non-tender items/extra items, which he may be called upon to carry out.

The Architect will approve all extra percentage rates. No work shall be carried out unless rate of extra item is approved.

All extra items and their cost implications shall be prepared well in advance. These extra items shall only be executed after written approval from Owner.

#### 26. Taxes

The Contractor will be reimbursed statutory increase made by the Government in taxes, after the award of this work, which have direct financial effect on the quoted rates after producing documentary evidence of its levy and subsequent payment. The amount equal to the increase will only be paid and no extra on any other account will be paid.

Likewise, if there is statutory decrease, it will be deducted from the bills raised by the Contractor.

#### 27. Retention money

5% value of the cost of the work shall be retained from every running bill towards retention money. No interest will be paid on the retention amount. This retention money will be retained in the form of cash. 50% of the retention money will be released on Architect issuing final completion certificate. And remaining 50% of the money which can be in the form of Bank Guarantee, will be released after two years after the final completion certificate after deducting for the expenses made by the Owner on cost of rectification/replacement of defective work or any other claim by the owner, in case Contractor refuses to carry out such rectification/replacement of defective work as may be advised by Architect. The defects liability period of such work will be extended by one more year from the date of rectification/replacement.

#### 28. Interest on delayed payments

Any reasonable delay in making payments will not vitiate the schedule or make contract void. Contractor will be entitled to charge interest on delayed payment. Contractor will be entitled for extension of time (without any claims other than interest and escalation) for persistent delays in making payments. Contractor has a right to stop the work if his two successive bills certified by Architect remain unpaid. In such a case, Contractor can claim the damage due to idle time and labour to be certified by Architect/consultant, whose decision will be binding on Owner and Contractor and will be out of purview of arbitration.

## 29. Guarantees Warranties to be submitted by the Contractor

The entire Bank Guarantees to be submitted shall be irrevocable, unconditional and without referring to the Contractor.

- 1) Mobilisation advance.
- 2) Performance Guarantee
- 3) Retention money
- 4) 10 years Guarantee for Anti-termite treatment
- 5) 10 years Guarantee for Waterproofing treatment

All Bank guarantees shall be from a NATIONALISED BANK ONLY.

#### 30. Variation in the Contract Sum

Contract will be valid for variation of up to  $\pm$  50% of contract amount.

#### 31. Basic Rates

The basic rates of the material will be as follows:

**Cement: Rs. 4700/-** per metric tonne **(Excluding GST)** 

Reinforcing Steel: Rs. 41200/- per metric tonne (Excluding GST) Structural Steel: Rs. 44100/- per metric tonne (Excluding GST)

# 32. Owner Supply of Materials

Not Applicable.

## 33. Indenting Materials supplied by Owner

Not Applicable.

# 34. Reconciliation of Cement and Steel supplied by Owner

Not Applicable.

#### 35. Inspection, Quality Surveillance, Rejection of Materials and Workmanship

All material and equipment furnished and work performed shall be properly inspected by Contractor at his expense, and shall at all times be subject to quality surveillance and quality audit by Architect or his authorised representatives who, upon reasonable notice, shall be afforded full and free access to the shops, factories or other places of business of Contractor and its suppliers and sub-Contractors of any tier for such quality surveillance of audit. Contractor shall provide safe and adequate facilities, drawing, documents and samples as requested, and shall provide assistance and co-operation including stoppage of work to perform such examination as may be necessary to determine compliance with their equipment's of this contract. Any work covered prior to any quality surveillance or test by Architect shall be uncovered and replaced at the expense of Contractor if such covering interferes with or obstructs such inspection or test. Failure of Architect to make such quality surveillance or to discover defective design, equipment, materials or workmanship shall not relieve Contractor of its obligations under this contract nor prejudice the rights of Owner thereafter to reject or require the correction of defective work in accordance with the provisions of this contract.

If any work is determined by Architect to be defective or not in conformance with this contract the provisions of the general condition titled "warranty" shall apply.

## 36. Testing

Unless otherwise provided in the contract, testing of equipment, materials or work shall be performed by contract at its expense and in accordance with contract requirements. Should Owner desire tests in addition to those required by this contract, Contractor would be given reasonable notice by Architect to permit such testing. Such additional test will be at Owner's expense.

Contractor shall furnish samples as requested and shall provide reasonable assistance and cooperation necessary to permit tests to be performed on materials or work in place including reasonable stoppage of work during testing.

Contractor shall conduct and carry out tests for quality of cement, steel and other materials from every batch procured by him, and see that the same satisfies the criterion of I. S. Code. Further if any material is rejected, Contractor shall intimate Owner immediately in writing and arrange to segregate the rejected materials. Actual cost of testing the same will be also be borne by the Contractor. However the rolling margin criterion will be ignored and will not be the reason for rejecting the material.

# 37. Warranty

Contractor shall submit draft copies of all WARRANTIES that would be required to be submitted by the Contractor as per the conditions of contract along with the duly-filled tender proposal.

All workmanship shall be first class and performed in accordance with sound construction practices acceptable to Architect. All equipment, materials and workmanship shall also conform to the requirements of this contract.

Contractor warrants all equipment and material it furnished and all work it perform against defects in design, equipment, materials or workmanship for a period from work commencement to a date **twenty-four (24) months** after acceptance of the work.

If at any time during the warranty period, Architect, Owner or Contractor discovers any defect in the design, equipment, materials, or workmanship immediate written notice shall be given to the other parties. Contractor shall within a reasonable time propose corrective actions to sure such defects to meet the requirements of this contract act as follows:

- 1. Rework, repair, or remove and replace defective equipment and materials or re-perform defective workmanship to acceptable quality at a time and in a manner acceptable to Architect.
- 2. Co-operate with other agencies assigned by Architect to correct such defects and pay to Owner all actual costs reasonably incurred by Owner in performing or having performed corrective action. or
- 3. Propose and negotiate in good faith an equitable reduction in the contract in lieu of corrective action.

All costs incidental to corrective actions including demolition for access, removal, disassembly, transportation, and re-installation, re-construction, re-testing and re-inspection as may be necessary to correct the defect and to demonstrate that the previously defective work conforms to the requirements of this contract shall be borne by Contractor.

Contractor further warrants any and all corrective actions it performs against defects design equipment, materials and workmanship for a period of twenty four (24) months in addition to any existing warranty period, following acceptance by Architect.

# 38. As-Built Drawings

At the time of submitting final bill or within 30 days of it, the Contractor will submit as-built drawings of items which have been executed by him or for proprietary items, items for which the Contractor had sought deviations from working drawing, catalogues, guarantees, warrantee manuals of equipment, maintenance manuals to the Architect. All the revisions, variations in the original drawings and contract must reflect in the As-Built Drawings. The Contractor will submit two hard copies of the complete set of drawings and two soft copies of the same in the format as specified by the Architect. Final payment will not be made unless As-Built drawings are received by Architect/Owner. Contractor shall issue a certificate to state that the As-Built drawings are accurate and complete after recording all deviations. The Architect will sign the acceptance of such as-built drawings before final payment is released.

## 39. Site Photographs

The Contractor shall take photographs of the works every month, and submit copies of the same showing the date of the photograph, to the Owner and Architect. The photographs should be sufficient to show the progress of work at site. Without photographs the claims of delay from the Owner/Architect will not be entertained.

The photographs shall be submitted with each bill and without which the Contractor's R.A. bills will not be entertained.

## 40. Measurements

Unless otherwise specified, measurements shall be based on I.S. 1200 (latest edition). The work will be measured in M.K.S. Units.

All measurement shall be recorded in the format approved by the Architect. All measurement shall be recorded for the work done up to  $25^{th}$  of the month. The recording of the measurements shall be carried out between  $25^{th}$  to  $30^{th}$  of the month.

## 41. Defective work

Defective work will not be measured if defects are found after the work was measured. Architect will have right to delete the quantities of such defective work and reduce the cost of the work payable to the Contractor at any stage of the contract, till the defective work is

rectified. All the tolerances will be as per relevant I.S. Codes, and in special cases also at the discretion of the Architect.

## 42. Use of Completed Portion of Work

Not Applicable.

#### 43. Non - waiver

Failure by Architect or Owner to insist upon strict performance of any terms or conditions of this contract, or failure or delay to exercise any rights or remedies provided herein or by law, or failure to properly notify Contractor in the event of breach, or the acceptance of or payment for any goods or services hereunder, or the review or failure to review design shall not release Contractor from any of the warranties or obligations of this contract and shall not be deemed a waiver of any right of Owner to insist upon strict performance hereof or any of its rights or remedies as to any prior or subsequent default hereunder nor shall any termination of work under this contract by Owner operate as a waiver of any of the terms hereof.

## 44. Virtual Completion

Will be issued by architect/ Owner after successfully completion of work.

## 45. Final Completion

On final completion of work, Owner, along with Architect and Contractor, shall inspect the work and shall give final approval, in the form of certificate for acceptance of work, for the work executed by the Contractor and certify that the work is complete as per terms and conditions of contract.

Contractor shall give an undertaking to the Owner that payroll, bills of materials and equipment, all charges by Contractor and sub-Contractors and other indebtedness connected with the work have been paid for before final certificate of payment is given.

For any dispute arising out of this contract, the judicial jurisdiction will be Mumbai.

## 46. Insurance

All the insurance cover as stated below will remain valid during till the contract is in force and the Owner accepts project. The contractor should provide Marine Insurance on an "All Risk" basis.

#### a. Workman's Compensation/Employer's Liability

The Contractor shall absolve the Owner of any payment on account of Worker's Compensation Act/Labour Rules/ESIS, if applicable/Provident Fund/Workers and Employees of Contractor's

and their sub-Contractor's, etc., and any other regarding Indemnity Insurance as applicable by law of the country.

Contractor shall take all insurance policies as required by law.

## b. Contractor's All-Risk Policy

Contractor shall take out insurance of any damage to property during construction to cover all risks. The value of such insurance shall be equal to total value of the tender + 10% of the replacement cost to cover, design and management cost and for covering the work.

## c. Public liability policy

The Contractor will take out comprehensive insurance liability policy for personal injury and property damage. It will cover any third party, Owner, and Architect along with their representatives for personal injury of not less than Rs.10,00,000/- (Rupees Ten Lakhs Only) for any one claim per person and for Rs. 50,00,000/- in total per year, when they visit site. This will be in addition to the other insurance he has to take out as per various clauses of conditions of contract.

The above policies and the limits specified therein will not relieve Contractor of his obligation to pay the actual damages

Contractor will deposit two copies of all the above policies with the Owner out of which one will be marked with Attention of Architect within one month of accepting the Letter of intent/work order.

Contractor shall also provide to Owner/Architect copies of the insurance premium receipts in respect thereof and should the Contractor make default in insuring or continuing to insure as aforesaid the Owner may himself insure against any risk with respect of which the default shall have occurred and deduct a sum equivalent to the amount of premium so paid from any amounts due or to become due to the Contractor.

## d. Contractor's plant and machinery

Contractor shall take out insurance of any damage to his own property during construction to cover all risks.

#### 47. Indemnity

i. The Contractor shall indemnify the Owner member, officer and employee of the Owner against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of any failure by the Contractor in the performance of the obligations of relevant labour laws, acts, regulations etc., and under the contract documents. The Owner shall not be liable for or in respect of any damage and or compensation payable by law in respect or in consequence of any accident or injury to any workmen or any other person in employment of the Contractor or his sub-Contractor and Contractor shall indemnify and keep

indemnified the Owner against all such damages and compensation against all claims, damage, proceedings costs, charges and expenses whatsoever in respect there of or in relation thereto. He will indemnify Owners, Architects and Consultants of any damages or consequential damages in case of its failure of the system, materials employed by him for executing work as stated elsewhere in this contract.

- ii. Should the Owner have to pay any money in respect of such claims or demand as aforesaid the amount so paid and the costs so incurred by the Owner shall be charged to the Contractor and the Contractor shall not be at liberty to dispute or question the right of the Owner to make such payment, notwithstanding same may otherwise to the contrary. The above-mentioned amounts shall be deducted from Contractor's dues.
- iii. In every case which by virtue of the provision of Workmen's Compensation Act, or other applicable provision of any other Act in force the Owner pays compensation to Contractor's workers during the execution of works, the Owner will recover from the Contractor's the amount of the compensation so paid and without prejudice to other rights, the Owner shall be at the liberty to recover such amount or sum due to the Contractor whether under this contract or otherwise. The Owner shall not be bound to contest any act, except on the written request of the Contractor and upon his right giving right becoming liable in consequence of contesting such claims.

#### 48. Units

In units of schedule of quantities, the abbreviations shall mean following:

Cu. M = Cubic Metre
R. M. or R. Mt = Running Metre
Sq. M = Square Metre
MT. = Metric Tonne
Q. R. = Quote Rate Only

## 49. Sub-Contractors

The Contractor is not allowed to sublet the work.

Sub-Contractors appointed by the Contractor for any important works such as Antitermite treatment, false ceiling, Aluminium works, curtain walling, etc., should be approved and acceptable to Architect.

#### **50. First Aid Facilities**

Where Owner has first aid facilities at the job site they may, at their option, make available such first aid facilities for the treatment of employees of Contractor who may be injured or become ill while engaged in the performance of the work under this contract. Contractor should provide his own First-Aid Kits at the site.

If first aid facilities and/or services are made available to Contractor's employees then, in consideration for the use of such facilities and the receipt of such services, Contractor hereby agrees:

- 1. To include as part of its obligation under the general condition titled "indemnity" the obligation to release, defend, indemnity and hold harmless Architect, Architect and Owner from all claims, demands and liabilities arising from the use of such services or facilities and
- 2. In the event any of Contractor's employees require off site medical services, including transportation thereto, to promptly pay for such services directly to the providers thereof.

#### 51. Safety Precautions

To ensure effective enforcement of the Rules and Regulations relating to Safety Precaution, the arrangement made by the Contractor shall be open to inspection by the Welfare Officer, or Safety Engineer or any persons nominated by the Owner or their representatives.

The Contractor shall be solely responsible for conducting operations under this contract to avoid risks involved in performing the work to all concerned.

He should follow, as a minimum, the following safety codes but not limit himself to only those mentioned below.

- 1. In respect of all labour, directly or indirectly employed in the work for the performance of Contractor's part of this agreement, the Contractor shall at his own expense arrange for all the safety provisions mentioned in the following:
  - a) Safety codes of CPWD
  - b) Indian Standards Institution
  - c) The Electricity Act
  - d) The Mines Act
  - e) OWNER safety policy
  - f) Any other Act as applicable
- 2. Before starting construction work, Contractor shall consult Architect and he (Contractor) must make safety plan to their satisfaction.
- 3. The Contractor should strictly follow all the existing labour laws, and also should execute the work strictly adhering to the following labour regulating & safety codes.
- 1) No labour below the age of 18 years shall be employed on work.
- 2) The Contractor shall not pay less than what is provided under law to labourers engaged by him or his sub-Contractors on this work
- 3) In respect of all labour, directly or indirectly employed in the work for the performance of Contractor's part of this agreement the Contractor shall at his own expense arrange for all the safety provisions as per safety codes of CPWD, Indian standards institutions, the Electricity Act, the mines act and such other acts as applicable.

The Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions.

Some of the safety rules of CPWD as set forth herein.

- 1) Contractor shall maintain First Aid facilities for his employees and those of his Sub-Contractors.
- 2) Contractor shall make outside arrangements for Ambulance service and for the treatment of industrial injuries. Names of those providing these services shall be furnished to the resident engineer prior to start of construction and their telephone number shall be prominently posted in Contractor's field office.
- 3) All critical industrial injuries shall be reported promptly to the resident engineer, as also copy of Contractor's report covering each personal injury requiring the attention of a Physician shall be furnished.
- 4) No person shall carry any photographic files, inflammable materials within the premises of the projects.
- 5) Contractor shall erect and maintain barricades in the form of Metal sheets around all nearby buildings, required in connection with this operation to guard or protect site and also along the compound wall
- a) Excavation
- b) Hoisting areas
- c) Area adjudged hazardous by Resident Engineers or Owner's Safety Engineers.
- d) Existing property subject to damage by Contractor's Operations.
- e) Rail-road unloading spots.
- f) Blasting operations, if required to be carried out.
- 6) Contractor's employees and those of his Sub-Contractors shall become acquainted with barricading practice of CPWD and shall respect the provisions thereof.
- 7) Barricades and hazardous areas adjacent to and along normal routes of travel shall be marked by approved by type of electric red flasher lights at night.
- 8) Suitable warning boards of standard traffic type shall be erected 30m away from each road barricades as well as barricades of work spots within 2m of road curb.
- 9) Suitable scaffolding should be provided for workers for all works that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra labourer shall be used for holding ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal to 4 vertical).

- 10) Scaffolding or staging more than 35m above the ground or floor swing or suspended from an overhead support or erecting with stationery support shall have a guard rail properly attached, bolted, braced and otherwise rewarded at least 1m high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for delivery of the materials, such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structures.
- 11) Working platform, gangway or the stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform or the gangway or the stairway is more than 3.5m above ground level or floor lever, they should be closely boarded. It should have adequate width and should be suitably fastened.
- 12) Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons of materials by providing suitable fencing or railing whose minimum height shall be 1m.
- 13) Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or public. The Contractor shall also provide all necessary fencing and lights to protect the workers and staff from accidents, and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit or action or proceedings to any such persons or which may with the consent of the Contractor be paid to compromise any claims by any such persons.
- 14) All trenches, 1.2m or more in depth, shall at all times be supplied with at least one ladder for every thirty meter length or fractions thereof.
- 15) Ladder shall be extended from bottom of the trench to at least one meter above the surface of the ground. The size of the trenches, which are 1.5m, or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing so as to avoid the danger of sides to collapse. The excavated material shall not be placed within two meters of the edge of the trench or the trench depth whichever is more. Cutting shall be done from top to bottom with proper slope. Under no circumstances shall undermining or undercutting be done.
- 16) Before any demolition work is commenced and also during the process of the work:
- a. All roads and open area adjacent to the work site shall either be closed or suitably protected.
- b. Electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall not remain electrically charged.

- c. All practical steps shall be taken to prevent danger to persons employed, from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or material as to render it unsafe.
- 17) All necessary personal safety equipment, as considered adequate by Resident Engineer, should be kept available for the use of the persons employed on site and maintained in a condition suitable for immediate use, and Contractor should take adequate steps to ensure proper use of equipment by those concerned.
- 18) Workers employed on mixing asphalt materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
- 19) Those engaged in white washing and mixing or stacking of cement bags or any materials which are injurious to the eyes shall be provided with protective goggles.
- 20) Those engaged in welding and cutting works shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- 21) When workers are employed in sewers and manholes, which are in use, the Contractor's shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so open shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
- 22) No paint containing lead or lead product shall be used except in the form of paste or readymade paint.
- 23) Suitable face masks should be supplied for use by the worker when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
- 24) Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on cessation of work.
- 25) Every rope used in hoisting or lowering materials or as a means suspension shall be of durable quality and adequate strength and free from patent defects.
- 26) Every crane driver or hoisting appliances operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to the operator.
- 27) In case of every hoisting machine and of every chain ring, hook, shackle, swivel and pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above in this paragraph shall be plainly marked with safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any other gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

- 28) As regards Contractor's machine, the Contractor shall notify the safe working load of the machines to the Architect wherever he brings any machinery to site of work and get it verified by the Architect, if he so desires.
- 29) Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce, to the minimum risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum, the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mass working apparels such as gloves, sleeves and boots and insulated tools as may be necessary should be provided. The workers shall not wear any rings, watches and carry key or other materials, which are good conductors of electricity.
- 30) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions 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.

These safety provisions should be brought to the notice of all concerned by displays on a notice board at a prominent place at the work spot. The person responsible for compliance of the safety code shall be named therein by the Contractor.

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 Welfare Officer, Resident Engineer or Safety Engineer of the Owner or their representatives.

Not-withstanding the above clauses, there is nothing in these to exempt the Contractor from the operations of any other act or rules in force in Republic of India.

#### 52. Assistance to other Contractor

Not Applicable.

## 53. Labour Licence

The Contractor shall obtain work-permit & labour-licence for the number of people to be employed. The contractor shall ensure that the number does not exceed the limit, as specified in the licence, at any point of time. The contractor should ensure minimum wages and also the other statutory benefits to the workers.

## **54. Statutory Records & Safety Precautions**

The Contractor shall maintain attendance registers, muster-roll, record of ESIC & P.F. numbers for each worker including the supervisors. The contractor shall register each workman under Building Contract Labour Act with the labour department. The contractor shall submit the bills along with the P.F. & ESIC challan.

The Contractor shall ensure that all the workers follow the safety procedures. Contractor shall give them Personal protective Equipment / safety-kit for the safe working environment.

Note: Time period will be taken as time from  $08^{th}$  day from the date of issue of letter of intent to time of final completion. However the defects mentioned before completion will have to be rectified by the Contractor at his expenses only after which final completion certificate will be given. Contractor's defects liability period will start after final completion certificate is issued.

# List of Warranties to be submitted by the Contractor (reference: Clause 38 of Special Conditions of Contract)

Following is the list of items for which WARRANTITIES are to be submitted by the Contractor. This list is not complete and binding on the Contractor. Architect may request Contractor to submit WARRANTY for certain additional items of work depending upon site conditions, nature of the work, etc.

- 1) Water Proofing
- 2) Pest Control Treatment

**55.** Final check list of entire work will be issued to contractor after LOI and contractor will follow the same during execution of work.

## 56. Municipal / Town Planning approvals and No Objection Certificates (N.O.C.'s)

- **56.1** The Contractor shall, at his own cost obtain the required N.O.C.'s from the Mumbai Municipal Corporation / Town Planning / Governmental Organizations whichever is applicable for obtaining completion certificate.
- The NOCs and Approval shall be procured by the Contractor at his own cost and expense and these shall be deemed to be INCLUDED in the submitted quotation. No expenses shall be re-reimbursed.
- 56.3 In the event of the failure of the Contractor to procure the above approvals and NOCs within the stipulated time frames. The owner shall be at liberty to engage any other agency to carry out the work and ALL expenses incurred in the process shall be recovered from any payments due to the contractor or from the security deposit or retention amount held by the owner.
- **56.4** No virtual completion certificate for the work shall be issued to the Contractor unless all the above NOCs and approvals are procured by the Contractor.

## A) TECHNICAL SPECIFICATIONS:

- 1.00 Unless otherwise specified, PWD specifications latest Volume I VI with upto date correction slip shall be followed in general. Any additional item of work if taken up subsequently, shall also conform to the relevant PWD specifications mentioned above. Should there be any difference between description of items as given in the Schedule of Quantities, nomenclature and specifications for individual items of work (special conditions) and I.S. codes, work shall be got done in the following order of precedence:
- i) Description of items as given in Bill of Quantity.
- ii) Drawings
- iii) Technical Specifications, Special Conditions of Contract and General Conditions.
- iv) PWD specifications.
- v) I.S. Codes.
- vi) Architects decision in writing

In case of items not covered by the PWD specifications referred to above, or particular specifications attached, reference shall be made to appropriate latest I.S. codes and the decision of the Engineer-in-charge / Architect shall be final and binding on the Contractor.

- 1.01 All stone aggregate and stone ballast shall be hard stone variety to be obtained from approved quarries at Mumbai region, or any other source to be got approved by the Architect.
- 1.02 The river sand shall also be obtained from Vaitarna / Mahad region or any other source to be got approved by the Architect and shall be screened as required for satisfying the specifications. If the sand brought to site is dirty it must be washed in clean water.
- 1.03 Bricks shall be of crushing strength not less than 35 kg./sq.cm. The average water absorption of brick shall not be more than 20% of its dry weight when immersed in water for 24 hours.
- 1.04 The standard sectional weights considered for conversion of length of various sizes of M.S. bars and Tor steel bars into weight are as under:

Size (Diameter)	Weight Kg./m.	Size (Diameter) mm.	Weight Kg./m.
6.	0.222	25	3.853
8.	0.395	28	4.834
10.	0.617	32	6.313
12.	0.888	36	7.990
16.	1.578	40	9.865
18.	1.998	45	12.485
20.	2.467	50	15.413
22.	2.984		

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1.05 Rate for every item of work to be done under this contract shall be for all lifts and leads, heights and depths, length and widths excepts when specially mentioned in the item otherwise and nothing extra will be paid on any account.

The rate for all items of work shall be unless clearly specified otherwise, includes cost of all labour, materials and other inputs involved in the execution of the item.

No extra payment shall be made for richer mix of concrete which flows from one member to another member during concreting of junction of beams, slabs etc.

The rate for all items in which use of cement is involved is inclusive of charges for curing.

- 1.06 The foundation trenches shall be kept free from water, while all the works below ground level are in progress. Nothing extra shall be paid for the same.
- 1.07 The masonry work shall be suitably recessed for provision of vertical electrical conduits and metal boxes according to the elevational drawings for electrical services. The horizontal electrical conduits shall generally be placed along joints of courses resorting to minimum cutting of masonry.

After the conduits and boxes are fixed by the Electrical Contractor the chase shall be closed neatly with cement mortar of same mix as that of plaster and nothing extra shall be paid for this. The Contractor shall have to work in co-operation with the Contractor for electrical work. No deduction for the recesses will be made in the measurement for masonry work and nothing extra shall be paid for making and closing the recessed chases.

- 1.08 All the materials equivalent to the specified one should be got approved by the Architects in writing before using such materials on the work.
- 1.09 The sanitary fittings, paints and other materials shall be obtained from one of the firms on the list of approved manufacturers of ISI mark. The materials shall be tested as per provision in relevant I.S. codes. The Contractors rates for items involving the use of the above materials shall be deemed to cover the cost of samples. Cost of packing, transportation and testing charges shall be borne by the Contractor.
- 1.10 The Contractor should submit a tentative programme of work within 15 days from the date of awarding the work.
- 1.11 The work of water supply, internal sanitary installations and drainage shall be carried out according to Municipal bye-laws. Nothing extra shall be paid to the Contractor for this. It shall be the Contractors sole responsibility to get the fixtures approved and the same connected to the Municipal main and delay in this regard shall be at Contractor's own risk and cost.

- 1.12 The tenderer should not quote unnecessary conditions contradicting the general conditions and particular specifications given in this tender, as such conditions apart from being not agreed to, can lead to rejection of the tender.
- 1.13 Any damage to work resulting from rains or from any other cause until the work is taken over by the department after completion shall be made good by the Contractor at his Own cost.

#### 2.00 INTERNAL CEMENT PLASTER:

- 2.01 Preparation of surface: The walls to be plastered to have all joints raked out to a depth of 5 / 10 mm. if not already done RCC surface shall be properly hacked to get good key to the plaster. All dust and oily matter if any shall be brushed and cleaned and the surface to be plastered shall be kept wet for 6 hours before plastering is commenced.
- 2.02 Proportion of mortar: Unless otherwise mentioned, the proportion of internal cement plaster for walls and ceiling shall be 1:4 (1 cement: 4 sand). Sand shall be from approved source, free from foreign matter and as applicable to internal wall and ceiling plastering. No more cement mortar shall be prepared than that can be used within half an hour.
- 2.03 Application of Plaster: The mortar shall be applied evenly with force on the surface to be plastered. The mortar surface shall be finished at once by being rubbed over with a trowel till the cement appears on the surface. All corners, angles and junctions shall be truly vertical and horizontal as the case may be, carefully and neatly finished. Rounding of corners and junctions where required shall be done without extra charge. The mortar shall adhere to the surface intimately when set and there shall be no hollow sound when struck. The thickness of plaster shall be minimum 12 mm. over the proudest part of the surface of brick wall and RCC surfaces and 20 mm. over stone walls. Plaster for ceiling shall not be more than 8 mm.
- 2.04 When neat cement finish is specified over the plaster surface, a coat of pure Portland cement slurry 1.5 mm. thick shall be applied and well rubbed to the plastered surface while the plaster surface itself is fresh.
- 2.05 When no finish is specified, the plastered surface shall be rubbed well to an even plane with a wooden float for external surface and finished smooth with a steel trowel for internal surface.
- 2.06 Rates to include : Apart from other factors mentioned elsewhere in this contract, rates for the item of plaster shall include for the following :
- (i) Erecting, dismantling and removing the scaffolding.
- (ii) Preparing the surface to receive the plaster.

- (iii) Providing cement plaster of the specified average thickness.
- (iv) All labour, materials, use of tools and equipment to complete the plastering as per specifications.
- (v) Curing for 14 days.
- (vi) Any moulding work is shown on the drawings or as specified unless : separately provided in the tender.
- (vii) Plaster work in jambs, arises, rounded angles, fair edges, narrow returns, quirks, 'V' joints, splays, drip mouldings, making good to metal frames, junctions with skirting or dado, narrow widths and small quantities, marking good around pipes, conduits, timbers, sills, brackets, railings etc. and making good after all the Sub-Contractors or nominated Sub-Contractors have done their work.
- (viii) Neeru or cement finish when specified in the item.
- 2.07 Mode of Measurements: Plaster shall be measured in Square Meters.
- (a) Walls:
- (i) The measurements of wall plastering shall be taken between the walls or partitions (the dimensions before plastering shall be taken) for the length, and from the top of floor skirting / dado (as the case may be) to the ceiling for the height.
- (ii) Deductions:
- (A) For jambs, soffits sills etc. and for opening not exceeding 0.5 sq.mt. each in area, ends of joists, beams, posts, girders, steps etc. not exceeding 0.5 Sq.mt. each in area and openings not exceeding 3 Sq.mt. each, deductions and additions shall be made in the following manner.
- (a) No deduction shall be made for ends of joists, beams, posts etc. and openings not exceeding 0.5 sq.mt. each, and no addition shall be made for reveals, jambs, soffits, sills etc. of these openings nor for finishing the plaster around ends of joists, beams, posts etc.
- (b) Deductions for openings exceeding 0.5 sq.mt. but not exceeding 3 sq.mt. each shall be made as follows and no addition shall be made for recess, jambs, soffits, sills etc. of these openings:
- (1) When both faces of wall are plastered with the same plaster deduction shall be made for one face only.
- (2) When two faces of wall are plastered with different plasters or if one face is plastered and the other pointed, deduction shall be made from the plaster or pointing out the side

of frames for doors, windows etc. on which the width of reveals is less than that on the other side, but no deduction shall be made on the other side.

- B. In case of openings of area above 3 Sq.mt. each, deductions shall be made for the openings but jambs, soffits and sills shall be measured.
- (b) Ceiling:
- (i) Ceiling shall be measured between the walls for partitions and the dimensions before plastering shall be taken.
- (ii) Ceiling with projected beams shall be measured over beams and the plastered sides of beams shall be measured and added to plastering on ceilings.

#### 3.0 EXTERNAL PLASTER.

3.0 The external plaster shall be applied in two coats and finished Sand faced. All the precautions such as covering windows by plywood / tin sheet and tying stitched Hessian to external face of the scaffolding shall be taken. The debris shall be taken down and stacked or carted away as directed.

The existing plaster if cracked, damaged or spelled, the loose and damaged plaster shall be broken and removed carefully by chipping or by light chiseling, so as not to disturb the sound concrete inside or so as not to break the brick wall.

If the plaster is to be applied on repaired concrete surface, the same shall be made rough to provide a key to the plaster. If brickwork is to be plastered, the joints shall be cracked out at least 12 mm deep and cleaned.

If the existing masonry is not maintained in proper line & level or the masonry is caved while removing of external plaster, the same shall be provided with dash coat in cement sand (1:4) to maintain the external original wall surface.

The surface to be plastered shall be cleaned of loose materials, thoroughly watered and kept adequately wet during plastering.

If plaster is done in patches, approved bond coat must be applied on the edges of old plaster in contact with new plaster. The external plaster shall be applied in two coats.

- (a). The first coat is made of 12 mm thick mortar in cement sand (1:4) with water cement ratio not exceeding 0.55. The workability and imperviousness of mortar is achieved by a addition of super plasticizers/waterproofing & polypropylene fibers(125 Grams/bag or as per manufacturer specification). The first coat is made rough to provide a key to the second coat is applied & shall not be allowed to dry for at least Five days.
- (b). The Second coat shall be a thin layer of 8 mm thick mortar with cement: sand (1:4) with addition of super plasticizers/waterproofing material &

polypropylene fibers. Precaution shall be taken that water cement ratio not exceeding 0.55. The workability and imperviousness of mortar is achieved by a addition of super plasticisers& polypropylene fibers (125 Grams/bag as per manufacturer specification). Finishing to plaster with granular texture by a rubber sponge. The final line, level and plane shall match with the existing unbroken plaster.

(c). Second coat shall be kept moist by watering and shall not be allowed to dry for at least Ten days.

Measurement: - The plaster shall be measured as per IS 1200 mode of measurement.

# 4.0 CERAMIC TILES / GLAZED TILES IN FLOORING & DADO:

#### 4.01 Flooring:

#### 4.1.1 Tiles:

Ceramic Tiles including special shall be of approved make and quality and shall conform to IS: 777 in all respects. Samples of tiles shall be got approved by the Engineer-incharge who will keep them in his office for verification as to whether the materials brought for use conform to the approved samples. Ceramic tiles shall be of the size as specified in BOQ.

#### 4.1.2 Mortar Bedding:

Cement sand mortar for bedding shall be prepared in a mortar mill. The amount of water added shall be minimum necessary to give just sufficient plasticity for laying and satisfactory bedding. Care shall be taken in preparing the mortar to ensure that there are no hard lumps that would interfere with the even bedding of the tiles. Before spreading mortar, sub-floor or base shall be cleaned off all dirt, scum, loose materials and laitance if any, by scrubbing with coir or steel wire brush or by hacking if necessary and then well wetted without forming any pools of water on the surface. Before laying the mortar, the sub-grade shall be got approved by the Engineer-in-charge. In case of RCC floors, the top shall be left a little rough. All point of level for the finished paving surface shall be marked out. The mortar shall then be evenly and smoothly spread over the base by the use of screed battens only over so much area as well as covered with tiles before the setting of the mortar. The thickness of the mortar bed shall not be less than 15 mm. and not more than 25 mm. Unless otherwise specified, the proportion of mortar bedding shall be C.M. 1:4.

Sand for mortar bedding shall be from approved source and shall conform to I.S. no. 2116-1965 as applicable to unreinforced masonary work.

#### 4.1.3 Laying finishing, curing and cleaning:

The tiles before laying shall be soaked in water for atleast 2 hours. Tiles which are fixed in the floor adjoining the wall shall be so arranged that the surface of the round edge tiles shall correspond to the skirting or dado. Neat cement grout of honey like consistency shall be spread over the bedding mortar just to cover so much area as can be tiled within half an hour. The edges of the tiles shall be smeared with neat white cement slurry and fixed in this grout one after the other each tile being well pressed and gently tapped with a wooden mallet till it is properly bedded and in level with the adjoining tiles. There shall be no hollows in bed or joints shall be kept as close as possible and in straight lines. The joints between the tiles shall not exceed 1.5 mm. wide. After fixing the tiles finally, in an even plane, the flooring shall be covered with wet saw dust. The tile flooring shall be cured for 14 days.

After the tiles have been laid in a room or the day's fixing work is completed the surplus cement grout that may have come out of the joints shall be cleaned off before it sets. Once the floor has set the floor shall be carefully washed, cleaned and dried. When dry, the floor shall be covered with oil free dry saw dust which shall be removed only after completion of the construction work and just before the floor is occupied.

#### 4.1.4 Rates to include:

Apart from other factors mentioned elsewhere in this contract, the Contractors rates quoted shall include for the following:

- i) Cleaning the base and providing and laying bedding mortar and levelling.
- ii) Providing and fixing the tiles including all specials like round edges, corner cups, angles etc. in neat cement float over the bedding mortar.
- iii) Filling the joints of tiles with neat white cement slurry.
- iv) Finishing, curing and cleaning.
- v) All labour materials and use of tools for carrying out the item as specified above.
- vi) In dado keystone should be pre-set on the back side of the tiles as instructed by the Engineer-in-charge.
- 4.1.5 Mode of Measurement: Measurement for flooring tiles shall be square meters as provided.

#### **5.1.0 Ceramic Tiles Dado:**

(a) Tiles:

Ceramic tiles shall be same as described under Ceramic tiles flooring.

#### (b) Mortar backing:

All the joints in the face work shall be raked out to a depth equal to not less than the width of the joints or as directed by the Engineer-in-charge. Concrete surface shall be properly hacked. All dirt, dust, oil or any other material that might interfere with satisfactory bond shall be removed. The surface shall be cleaned and scrubbed with fresh water and kept wet for 6 hours prior to applying and hacking mortar. The dado

work shall not be commenced unless the preparatory work is passed by the Engineer-incharge. The proportion of mortar for backing shall be 1:3 cement mortar. Sand in mortar bedding shall be from approved source, as applicable to internal wall and ceiling, plastering and external wall plastering. The thickness of mortar backing shall not be less than 12 mm, not more than 20 mm.

# (c) Fixing dado tiles:

Dado work shall be done only after fixing tiles on the floor key stone / chips are to be fixed at the back of tile with Araldite or any other epoxy based synthetic solution as per instructions of the Engineer-in-charge. The Ceramic tiles shall be soaked in water for atleast 2 hours before being used for dado work.

Tiles shall be fixed when the cushioning mortar is still plastic and before it gets very stiff. The back of tiles shall be covered with a thin layer of neat cement paste and the tile shall then be pressed in the mortar and gently tapped against the wall with a wooden mallet. The fixing shall be done from bottom of wall upwards without any hollows in the bed or joints. Each tile shall be fixed as close as possible to the one adjoining. The tiles shall be jointed with white cement slurry. Any difference in the thickness of tiles shall be evened out in cushioning mortar so that all tiles faces are in one vertical plane. The joints between the tiles shall not exceed 1.5 mm. in width and they shall be uniform. While fixing tiles in dado work care shall be taken to break joints vertically. After fixing the dado, they shall be kept continuously wet for 14 days. If doors, windows, or other openings are located within the dado area, the sills, jambs, angles etc. shall be provided with white ceramic tiles and appropriate specials according to the foregoing specification and such tiles area shall be measured not alongwith the dado.

#### (d) Cleaning:

After the tiles have been fixed the surplus cement grout that may have come out of the joints shall be cleaned off before it sets. After the complete curing the dado or skirting work shall be washed thoroughly clean.

# 5.1.2 Rates to include:

Apart from other factors mentioned elsewhere in this contract the rates for the item of dado or skirting shall include the following:

- i) Backing mortar.
- ii) Providing and fixing tiles including all specials like round edges angles, capping etc. in neat cement float over backing mortar.
- iii) Jointing of the tiles with white cement slurry.
- iv) Curing

- v) Cleaning.
- vi) All labour material, use of tools and equipments for carrying out the items as specified above.
- 5.1.3 Mode of Measurements: Dado shall be measured in square meters as provided.
- 6.0 SPECIFICATIONS FOR GENERAL STRUCTURAL REPAIRS
- 6.1. This covers the general requirements of items involved in Structural repairs viz.

  Breaking and chiseling. Surface preparation and treatment: restoration and curing etc.

  Since there is an element of judgment and actual extent of deterioration involved, definite instructions of these can be given only at site during actual execution.

All repairs to the affected Structural members must be preceded with a proper support system. This structural support system shall be worked out for various members. Necessary suitable propping is required to be provided to ensure release of loads on the treated members. The Contractor shall compulsorily seek prior approval of the intended support system from the Consultants. However the ultimate responsibility of the support system rests with the Contractor.

# 6.2 Chiseling of concrete surface :-

The surface of the reinforced concrete element viz. Column, beam, slab, wall etc. will be exposed using chisel and hammer carefully up to the reinforcement rods. All corrosion on the rods shall be physically removed by chiseling in order to further expose them. Where there are deep cracks in the concrete element, special precaution will be taken while chiseling so as to avoid further distress to the element. Steel rods or mesh may also be required to be removed along with chiseling. The chiseled surface shall be cleaned with water and wire brush.

# 6.3. Breaking of plaster:-

The coats of plaster over concrete and masonry wall will be removed carefully with chisel and hammer such that the masonry / concrete element underneath is not damaged. All coats of the plaster shall be removed along with visible traces of cement / lime and the surface thoroughly cleaned and hacked where required, receiving new coats of plaster. For ease and neatness in working, the edges of the exposed portions shall be straightened.

Measurement for breaking plaster shall be taken as the actual area exposed projected to the original surface of the element. Where the plaster is removed together with the chiseling or breaking of concrete no measurements shall be taken separately for this.

#### 6.4. Breaking of reinforced concrete:-

Part of full reinforced concrete element viz. Slab beam, wall, column, fin, etc. will be broken carefully using chisel and hammer. For neatness of work, the edges of the broken portion shall be fairly straight. The broken surface shall be chiseled straight and cleaned so as to facilitate bond with new mortar /concrete. All highly deteriorated steel reinforcement shall be provided with extra steel as directed. Where insufficient lap length for new reinforcement is available, additional concrete may have to be broken in order to expose adequate length of the existing reinforcement may be directed.

Measurement shall be taken as actual volume of concrete broken with the steel based on the original dimension of the concrete element.

# 6.5. Application of Rust remover:-

The entire surface of the exposed reinforced concrete element should be thoroughly cleaned. The reinforcement rods must be thoroughly cleaned using a chisel, scrapper, wire brush and emery paper. The rust remover is to be applied carefully on the exposed dry surfaces of the reinforcement rods with a brush. The rust remover must be applied as per the manufacture's specification. Allow air-drying of 24 hours before any further treatment is done on this surface after cleaning.

Measurement shall be taken of the entire chiseled area where reinforcement rods are exposed and rust remover applied or Actual quantity used (see BOQ)

# 6.6. Scaffolding:-

Scaffolding shall be safe to erect. Under no circumstances will holes be allowed to be made in the walls to support the scaffoldings. Tying of scaffolding to the old pipes of the building will be disallowed. Temporary props between balconies or chajjas to give lateral support to the scaffolding will be permitted where feasible.

#### 6.7. Sand:-

Sand for concrete and plaster mortar shall be only river sand of proper gradation. Stilt and other impurities must not exceed 4%. If it is more than the same should be thoroughly washed to reduce the silt contents at site. Improper sand shall be immediately removed from the site and the decision of the Consultant shall be final.

#### 6.8. Curing:-

New concrete shall be maintained damp for a period of 2 weeks minimum. New plaster shall be cured a latest 3 times a day for a period not less than 8 days. The 1<sup>st</sup> coat of plaster shall be cured for a period not less than 8 days. If required the surface shall be maintained damp using a wet Hessian cloth.

#### **APPROVED MAKES OF MATERIALS-CIVIL**

#### NOTE:

- 1. All materials shall be of first quality as produced by the manufacturer. This is particularly applicable to glazed and ceramic tiles, paints and sanitary fittings.
- 2. In case it is established that brands specified below or not available in the market or the delivery period is too long; equivalent brands may be used after approval by the Architects, in which case contractor shall produce all necessary documents such as catalogs, certificates etc., to prove their suitability.
- 3. Approved samples shall be kept at site in the office of the clerk-of-works.
- 4. Where specifically called for, warranties shall be obtained from the manufacturers in favor of the owner.

No.	MATERIAL	APPROVED MAKE / BRAND
1.	Cement (53 grade)	Ultratech, A.C.C., Birla shakti, Ambuja
2.	Cement (43 grade)	Ultratech, A.C.C., Birla shakti, Ambuja
3.	PPC	Ultratech, A.C.C., Birla shakti, Ambuja
4.	White cement	Birla, J.K.
5.	Putty	Birla White / JK White
6.	Cement and mixtures (Plasticizers hardness, retardant etc.)	Fosroc, Sikaqualcrete, Bauchemie
7.	High yield strength deformed bar	As specified, make Rajouri / Kalika / Rajlakshmi
8.	Steel Sections	Jindal, Hindustan & Tata.
9.	Anti termite treatment	Dursban (TC) (Chlorpyifos 20% EC)
10.	Glazed tiles	1st quality Nitco / Kajaria / Johnson / Euro or equivalent.
11.	Ceramic Tiles	Kajaria / Nitco/ Euro / Johnson
12.	Kotah / Granite / Rough Shahabad flooring stone	Export Quality / As approved.
13.	Katni Marble	Export Quality / As approved.
14.	Flush Doors	Anchor, National, Tower, Classic
15.	Commercial Plywood	Anchor, Euro, National, Century, Greenply.

16.	Marine Plywood	Anchor, Euro, National, Century, Greenply.
17.	PVC Doors	Eureka / Sintex / Rajashree
18.	Laminates	Formica, Royal Touch, Marino, Greenlam
19.	Aluminium Sections	Jindal, Hindalco
20.	Glazing (Float Glass)	Modi Float, Triveni, Asahi, Saint Gobain
21.	SPIDER FITTINGS	Delco, Dorma, or equivalent.
22.	Floor springs/ Lock patch	Enox, Hardwyl,
23.	Silicon	dowcorning, Ge make
24.	Waterproofing Compounds	Dr.Fixit.,Pedilite, Impermo.
25.	Paints	Asian / Berger / Nerolac / Dulux
26.	Waterproof cement paint	Snowcem
27.	Asbestos Roof Sheets	Everest, Charminar
28.	Expansion bolts	Fischer / Hilti
29.	Acp work (elevation treatment )-fittings	Euro bond, Timex
30.	Vitrified tiles	Kajaria / Nitco/ Euro / Johnson
31.	Light Weight Bricks	Ecolite, U-crete, Ultratech, Flyo-crete.
32.	Gypsum –finished item	Gypsum india,
33.	Metacolour sheet	Tata, CRIL

Any material other than list should need to get approved from University engineer and architect. Material sent for approval must be good standard and quality.

# **STANDARDS OF CEMENT CONSUMPTION**

Sr. No.	Item	Unit	Requirement in bags		
	PLAIN CEMENT CONCRETE				
1.	Cement concrete (1:2:4)	Cum.	5.84		
2.	Cement Concrete (1:3:6)	Cum.	4.05		
3.	Cement Concrete (1:4:8)	Cum.	3.20		
4.	Cement concrete (1:5:10)	Cum.	2.52		
	REINFORCED CEMENT CONCRETE (as per mix	xed design	)		
5.	Cement concrete M-15	Cum	Minimum As per IS Code / Design Mix		
6.	Cement concrete M-20	Cum	Minimum As per IS Code / Design Mix		
7.	Cement concrete M-25	Cum	Minimum As per IS Code / Design Mix		
8.	Cement concrete M-30	Cum	Minimum As per IS Code / Design Mix		
9.	Cement concrete M-35	Cum	Minimum As per IS Code / Design Mix		
	BRICK WORK				
10.	B.B. Masonry in C.M. 1:6	cum.	1.44		
11.	B.B. Masonry in C.M. 1:8 proportion	Cum.	1.13		
12.	Half brick masonry in C.M. 1:3 proportion	Sqm.	0.17		
13.	150 mm thick brick masonry	Sqm.	0.22		
	MASONRY				
14.	U.C.R.S. Masonry in C.M.1:6 proportion	Cum	1.77		
15.	C.R.S. Masonry in C.M. 1:5 proportion	Cum	1.80		
16.	C.R.S. masonry in C.M. 1:6 proportion	Cum	1.50		
	DAMP PROOF COURSE				
17.	Providing & laying damp proof course 50 mm thick in (1:2:4)	Sqm.	0.35		
18.	Finishing the terrace slab 20 mm thick in C.M. thick in 1:3 proportion	Sqm.	0.20		
19.	Providing water proofing to W.C. and bath	Sqm.	0.276		
20.	Providing water proofing in W.C. and bath including brick bat coba.	Cum.	4.00		
21.	Box Type Water proofing	Sqm.	0.50		
	PLASTERING				
22.	Providing internal cement plaster 6 mm thick single coat in C.M. 1:4	Sqm.	0.045		
23.	Providing internal cement plaster 6 mm thick single coat in C.M. 1:3	Sqm.	0.07		

24.	Providing cement plaster 12 mm thick in single coat in C.M. 1:5	Sqm.	80.0
25.	Providing cement plaster 12 mm thick in single coat in C.M. 1:4	Sqm.	0.10
26.	Providing cement plaster 12 mm thick in single coat in C.M. 1:3	Sqm.	0.12
27.	Providing cement plaster 20 mm thick in single coat in C.M. 1:3	Sqm.	0.19
28.	Providing cement plaster 20 mm thick in single coat in C.M. 1:5	Sqm.	0.13
29.	Providing cement plaster 20 mm thick in single coat in C.M. 1:5 proportion	Sqm.	0.13
30.	Providing cement plaster 20 mm thick in single coat in C.M. 1:4 proportion	Sqm.	0.15
31.	Providing cement plaster 20 mm thick in single coat in C.M. 1:3 proportion	Sqm.	0.19
32.	Providing cement plaster 25 mm thick in two coat in C.M. 1:4 proportion	Sqm.	0.22
33.	Sand faced plaster in two coats	Sqm.	0.22
34.	Rough cast plaster in two coats in C.M. 1:4 proportion	Sqm.	0.22
35.	Providing flush groove pointing in C.M. 1:3 for brick work	Sqm.	0.03
36.	Providing flush groove pointing in to stone masonry in C.M. 1:3 proportion	Sqm.	0.025
37.	Providing tuck pointing with C.M. 1:3 prop	Sqm.	0.05
38.	Providing vee pointing for stone masonry in CM 1:3	Sqm.	0.03
39.	Providing fine finish 1.5 mm, thick over green surface	Sqm.	0.044
	PAVING, FLOORING FINISHING AND DADO		
40.	Providing and laying R.S.H. flooring 25mm to 30mm on bed of 1:6 C.M. and pointing C.M. 1:3	Sqm	0.135
41.	Providing and laying R.S.H. flooring 40mm to 50mm on bed of 1:6 C.M. and pointing C.M. 1:3	Sqm	0.14
42.	Providing and laying R.S.H. flooring 50mm to 60mm on bed of 1:6 C.M. and pointing C.M. 1:3	Sqm	0.150
43.	Providing and laying polished Shahabad stone flooring 25mm to 30 mm thick on bed 1:6 proportion	Sqm.	0.13
44.	Providing and laying polished Tandur stone flooring 25mm to 30 mm thick on bed 1:6 proportion	Sqm.	0.130
45.	Providing and laying polished Kotah stone flooring 25mm to 30 mm thick on bed 1:6 proportion	sqm.	0.130
46.	Providing and laying skirting and dado of polished Shahabad stone 25mm to 30 mm with	Sqm	0.18

	1:4 C.M.		
47.	Providing and laying skirting of polished Tandur stone 25mm to 30 mm with 1:4 C.M.	Sqm.	0.18
48.	Providing & laying C.C. flooring 40 mm thick with C.C. 1:1½:3	Sqm.	0.36
49.	Providing & laying C.C. flooring 50 mm thick with C.C. 1:1½:4	Sqm.	0.44
50.	Providing and laying flooring of plain cement tiles of 25 x 25 mm on bed for flooring	Sqm.	0.15
51.	Providing and laying plain cement tiles for dado and skirting 1:4 proportion	Sqm.	0.18
52.	Providing and laying coloured tiles 25 x 25 mm size	Sqm.	0.15
53.	Providing and laying for coloured tiles for dado skirting	Sqm.	0.18
54.	Providing and laying white glazed tiles for flooring	Sqm.	0.22
55.	Providing and laying glazed tiles for dado and skirting	Sqm.	0.21
56.	Providing and laying gray cement base mosaic tiles for flooring 25 x 25 cm	Sqm.	0.15
57.	Providing and laying for dado and skirting cement base mosaic tiles 25 x 25 cm	Sqm.	0.18
58.	Providing and laying machine cut white Makrana flooring	Sqm.	0.17
59.	Providing and laying is situ marble mosaic tiles 10 mm thick		
	Gray Cement	Sqm.	00.200
	White Cement	Sqm.	0.130
60.	Providing and laying is situ dado tiles 10 mm thick		
	Gray Cement	Sqm	0.20
	White Cement	Sqm	0.08
61.	Providing & laying required position flooring of broken china	Sqm.	0.30
62.	Providing and laying polished shahabad stone 25 mm to 30 mm thick for tread and riser	Sqm.	0.18

#### **LETTER OF OFFER**

To,

# The Registrar

SNDT Women's University 1, NathibaiThackersey Road, Churchgate, Mumbai 400 020

**Subject:** E-Tender for Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai

# Dear Sir.

bear bir,		
With refere	nce to the tender invited by you for th	e above mentioned work, I/we do hereby offer to
perform, provide, e	xecute, complete and maintain the wo	rk/s in conformity with the drawings, Conditions
of Tender, Articles	of Agreement, Conditions of Contract, S	Specifications and Bill of Quantities for the sum of
Rs	(Rupees	only) at the Percentage quoted in
the Bill of Quantitie	S.	
I/We have s	atisfied myself/ourselves as to the loc	ration of site, examined the drawings and read the
Articles of Agreeme	nt, Conditions of Tender, Conditions o	of Contract and the Specifications etc. I/We agree
to finish the whole	of the work/s within months fr	om the date of commencement of ht work, fully
understanding that	time will be the essence of the Contra	ct and we will pay the agreed liquidated damages

in case of any delay on our part. We also agree to carry out the work with the best of workmanship and maintain a very high degree of accuracy and quality, using the best of specified construction materials. In the event of any defects occurring within one year from the date of actual completion, we agree to repair and rectify the same to the complete satisfaction of the Owner, in lieu of which, we agree to keep with the

I/We further agree to abide with all requirements of the Owner in respect of any other agency involved in any other aspect of the present proposed construction work and to extend our complete cooperation to any such agency in the interest of the timely and successful completion of the project.

Owner the amount of Security Deposit and Retention Percentage, as per Conditions of Contract.

I/We understand that you are not bound to accept the lowest or any tender you may receive.

Yours faithfully,

Signature	of t	he Con	tractor
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Date:

Address:

Note: \* Insertion to be made by the Tenderer

# Name of Work: Tender of Waterproofing of Terrace of C. U. Shah College of Pharmacy for SNDT Women's University in Juhu campus, Mumbai

# **Estimate:**

nate:					
Sr. No.	Description of Items	Qty	Unit	Rate	Amount
1	Removing the existing cement plaster of any thickness without causing dust nuisance and stacking the debris upto a distance of 50 meters or spreading in the compound and cleaning the site etc. complete. Note: Following items to be executed after prior approval of Superintending Engineer.	352.2	Sq. M	44.28	15595.416
2	Removing brick bat coba including stacking the spoils as directed with all leads, lifts etc, complete.	60.53	СМ	547.56	33143.807
3	Lowering down the the debris obtained from breaking and removing the cement plaster /burnt brick masonry of the first floor by any means without sausing dust nuisance and damage to structure, stacking the same as and where directed including cleaning the site complete.	90.14	Cum	651.24	58702.774
4	Removing and kind of debris including loading, in truck and conveying to approved dumping point beyond MCGM limits, unloading, spreading etc. Complete	90.14	Cum	644.92	58133.089
5	"Providing leak proof treatment by injection grounting method to existing floor without removing tiles of W.C. /Bath with water proofing compound and cement solutions making holes, refilling and making them water tight including making good the damages, cleaning etc. complete.	810	No.	610	494100
6	Providing expansion joints in R.C.C. framed structure (at Terrace level) with remolded filler 25 mm thick with 40 mm wide and 1 mm thick stainless steel plate as required, bitumen poured filler and finishing etc. complete as directed.	15	Sq.M	4561.9	68428.8
7	Finishing the terrace slab integrally with cement mortar 1:1 proportion with 20mm thick layer including curing, finishing using water proofing compound and into fiber at the rate of 1 kg each compulsory for per bag of cement, cleaning the surface etc. complete	807	Sq.M	181	146067
8	Providing and laying in required position flooring of broken China mosaic of approval colour and pattern laid on bed of cement mortar 1:4 including neat cement float giving proper slopes, compaction curing and finishing etc. complete.	807	Smt.	798	643986
9	Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm	352.2	Sqm	753.15	265259.43

	thick in cement mortar 1:4 using waterproofing compound at 1 kg per cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen				
	days scaffolding etc.complete.				
10	Providing and applying two coats of exterior acrylic emulsion paint confirming to corresponding I.S. of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface, applying primer coat ,scaffolding if necessary , and watering the surface for two days etc complete.	352.2	SM	232.2	81780.84
					1865197.20
			T	otal Rs.	1865198.00