



UEV/80DYE/1012/279/2016.  
Fort -campus, Mumbai-400032  
Date:- 15/06/2016

### **Tender Notice.**

The Registrar, University of Mumbai ,Fort-400032 invites wax sealed tenders from experienced and competent Lift Manufacturer for "Supply, Installation , commissioning and Testing of one new Passengers lifts at Annex to Examination House Building (CAP Building) In University of Mumbai at Kalina Campus .The details about tenders are mention below & you are requested to submit your Financial offer in your letter Head along with all Necessary documents on or before 22<sup>nd</sup>June 2016 at 3.00 pm, to the University Engineer office, RN- 118, University of Mumbai, Fort Campus & Tender will be open on same day at 3.00 pm, if possible.

The Register, University of Mumbai has reserves the right to reject all or any tender without assigning any notice. And his decision will be legally bind to all tendrer.

Sd/-

The Registrar  
University of Mumbai

University of Mumbai



**UNIVERSITY OF MUMBAI**  
**VIDYANAGARI CAMPUS, KALINA**

**Supply, Installation, Commissioning and Testing work of New Passengers lift at Annex to Examination House (CAP Building) in University of Mumbai, Kalina Campus.**

**CONDITIONS OF CONTRACT**  
**BILL OF QUANTITIES**  
**& FINANCIAL BID**

**NAME OF WORK : Proposed "Supply, Installation , commissioning and Testing work of New Passenger Lift at Annex to Examination House ( CAP Building) in University of Mumbai, Kalina Campus.**

The Tender Document consists of the following documents:

Page 1 to Page 24

**Issued to** :

**M/S.**

---

---

---

---

---

---

**CONTRACTOR**

**ARCHITECT**



## NOTICE INVITING FOR TENDERS

To,  
The Tendirer.

**Sub:** - Notice Inviting Tenders for Supply & Installation ,Commissioning & Testing work of Annex to Examination House Passenger Lifts In University of Mumbai, Kalina Campus

Dear Sir,

Sealed tenders (Percentage rate) are invited by The Registrar of University of Mumbai, for Proposed Supply Installation, Commissioning & testing work above Lift for University of Mumbai, at Kalina Campus. The work is to be carried out according to Specification and terms and conditions of this tender document.

### **Specification of Schedule B :-**

Project Name	Annex to Examination Building PASSENGER ELEVATOR
Model	Passenger Elevator
Capacity	10 Person ,680 Kg
Quantity	01 no.
Speed	0.65
Type of drive	3V V F
Machine room	Required
Location of machine	Above Hoistway
Travel	23 M
Serving	5 Stop
Opening	5Opening
Floors	5 Stop
Well size required	2000 x 2000mm
Car size	1200 x1500
Car enclosure	S.S. Hairline Finish
Flooring	P V C
Electric light	4NOS. LED Lights
Fan	Blower
Car door	S.S Centre opening Stainless Steel, Hairline Finish
Landing doors	S. S Centre opening Stainless Steel, Hairline finish
Clear opening	900 X 2000mm
Operation	Automatic
Control	Full collective
Indicator (Car & landing)	Digital Direction & Position scrolling type
Features	Signal Fixture in stainless steel face plate
	Inverter based Emergency Light
	Car Handle
	Fire Men Drive
	Automatic Rescue Device
Headroom	4800mm
Pit Depth	1600mm
<b>Note</b>	<b>1) Required Paper to Complete the PWD formalities will be done by the Tendirer /Agencies on their own credit .</b>
	<b>2) Tendirer /Agencies have requested to submit their Wax sealed tenders to the University of Mumbai without any conditions .&amp; Conditional tenders will be rejected without any notice</b>

**TERMS & CONDITIONS :-**

**TIME LIMIT FOR COMPLETION OF WORK**

The work is to be completed within Three calendar months including monsoons from the date of written order to commence the work.

**VALIDITY**

Validity of the tender will be 120 days from the date of opening of the tender and thereafter until it is withdrawn by the contractor by notice in writing duly addressed to The Registrar, University of Mumbai and sent by Registered Post A.D. or delivered at the office. Such Withdrawal after 120 days shall be effective from the date of receipt of notice by The Registrar, University of Mumbai.

Acceptance of tender will rest with University of Mumbai who reserves the right to accept any or reject all the tenders or split the work to any other Contractor at the time of issuing work order or during the contract period, without assigning any reasons for doing so.:-

The tender is liable for outright rejection if on opening it is found that:

The tenderer has not followed the procedure laid down for submission of tender strictly.

The tenderer proposes any alteration in the work specified in the tender or any other conditions.

Any one or more of the document required as per proceeding paras is or are missing.

Any corrections, additions or alterations are made by the tenderer, or any page of tender documents.

Any of the pages of the tender are removed or replaced by the tenderer.

Any erasers are made by him in the tender.

Any pages or pasted slip is or are missing.

The tenderer has not signed all corrections and additions or pasted slips and in case of a firm or company each partner thereof does not sign and the signature / signatures are not attested by witness.

Tenderer has not submitted the attested true copy of Income Tax Return Valid for the Year duly attested. Partnership Deed & Power of Attorney.

In case of Partnership for Company, Tenderer has not submitted duly Attested Partnership Deed & Power of Attorney.

Partner there of has not signed and stamped the signature are not attested by a witness.

University of Mumbai

Contractor

The tenderer has not produced the original license or attested copy of his having been registered with the Assistant Commissioner (Regulation & Abolition) Act, 1970 and the Maharashtra Contract Labour (Regulation & Abolition) Act. As a rule, No tender will be considered valid for acceptance, unless the license is submitted with the tender in appropriate cover, or produced at least within fifteen days from the date of issue of letter of intent.

Works completed by the tenderer and works in progress will be inspected by the University Committee for assessment of the quality of the work before the contract is finalized.

All tenderer /Agencies must have to collect all necessary Government sanctions papers from all the respective Government & External Agencies offices on their own credit & requested to submit all above Government Approved & External Agencies reports regarding to Annex to Examination House Passanger Lift work at The University Engineer office, University of Mumbai.

If the contractor has a capacity to reduce the completion period, they may mention in their tender without any condition. Conditional tender will be rejected.

The tender shall be based on only the materials of approved make which is attached with this document. In case if any of prescribed materials of given make is not available then only other equivalent make of materials will be allowed and in such case, the difference of cost of materials will be deducted from the immediate running bill.

The tenderers are requested to visit the site before tendering and examine the site conditions, design drawings, environment around, contract conditions, all works covered in schedule 'B' and required construction period.

All tenderer /Agencies have requested to submit their Wax sealed tenders to the University of Mumbai without any conditions .& Conditional tenders will be rejected without any notice

VAT, Service tax and any other tax and taxes shall not be paid to the contractor and the rates quoted by the contractor are inclusive of VAT, Service tax and all taxes at prevailing rate during quoting the tender.

The contractor has to work absolutely in co-ordination with all other contractor & agencies working on site and any delay occurred due any contractor & agency has to be accommodated without any financial implications. No claim whatsoever will be entertained due to delay and or any reason because of any agency.

Thanking you.

# STANDARD DRAFT LETTER FOR TENDERER

## NOTE:

(This letter will be a forwarding letter for submitting the tender and shall be on letter head stating address / es, telephone numbers , telegraphic address, Fax etc.)

DATE:

To,  
THE REGISTRAR  
UNIVERSITY OF MUMBAI  
KALINA CAMPUS,  
MUMBAI.

Dear Sir,

**Tender for Proposed Supply, Installation, Commissioning & Testing work of Annex to Examination House Lift In University of Mumbai, Kalina Campus of Mumbai, Kalina Campus.**

With reference to the public notice of Inviting Tenders dated 08.06.2016. I / We hereby submit my/ our tender for **Proposed Supply, Installation, Commissioning & testing work of above Lift for ----- University of Mumbai, Kalina Campus.** The percentage below / above the estimated rates are entered in Volume II Schedule of works in words & figures dully signed & stamped (Memorandum showing items of work to carried out).

We have examined all drawings, specifications, form of contract, schedule of quantities, all terms and conditions of tenders.

I / We have visited and examined the site, with all physical features, contours, characteristic and all other requisite information relating there-to as affecting the tender invited by you.

I / We agree that the offer shall remain open for acceptance for minimum period of 120 days (One hundred and Twenty days) from the date of opening Envelope No.1 and 2 and thereafter until its is withdrawn by me/ us by notice in writing duly addressed to the authority opening the tenders and sent by registered post / A.D. or otherwise delivered at the office of such authority.

I / We undertake to complete and deliver the whole of the works within Three months from the date of issue of an information from you that this tender has been accepted and upon receiving possession of the site , under a forfeiture as stated under all the conditions of contract for everyday that the works shall remain incomplete after the expiry of the aforesaid date as agreed compensation as per conditions of contract for not completing the work in time subject to the conditions of relating to extension of time, if any, granted by you.

I / We agree to the following terms of payment :

30% advance payment against bank guarantee of equivalent amount valid till handing over the elevators

60% against material on site

Balance 10% after installation and handing over the elevators

Should this tender be accepted I /We hereby agree to abide by and fulfill all he terms, and provisions of all the conditions of contract and execute the work in accordance in all respects with the specifications, design, drawing and instruction and in default thereof to forfeit and pay to Owner the sums of money mentioned is said conditions.

Contractor's Signature

Address

SIGNATURE OF CONTRACTOR  
BEFORE SUBMISSION OF TENDER

Date the \_\_\_\_\_ day of \_\_\_\_\_ 2016.

Signature of Witness

Address

Occupation

SIGNATURE OF WITNESS TO  
CONTRACTOR'S SIGNATURE



# MEMORANDUM

1. GENERAL DESCRIPTION : Proposed Supply and Installation Commissioning & Testing work of Annex to Examination Housev Passanger Lift at University of Mumbai,Kalina Campus-98
2. TERMS OF PAYMENT :  
• 30% advance payment against bank guarantee of equivalent amount valid till handing over the elevators  
• 60% against material on site  
• Balance 10% after installation and handing over the elevators
3. TIME ALLOWED FOR THE WORK FROM THE DATE OF WRITTEN ORDER TO COMMENCE THE WORK : **Three ( 3 )** calendar months including monsoons for Complete project.

---

SIGNATURE OF CONTRACTOR

**Name of work**

**: Tender for Proposed Supply, Installation, Commissioning & Testing work of Annex to Examination House passengers Lift at University of Mumbai, Kalina Campus.**

**DECLARATION OF THE CONTRACTOR**

I / We hereby declare that I / We have made myself / ourselves thoroughly conversant with the local conditions regarding all materials and labour and I / We have studied thoroughly all the conditions of contract and accept the same totally on which I / We have been based my / our rates for this tender. The specifications and leads on this work have been carefully studied and understood before submitting this tender. I / We undertake to use only the best materials and of manufacturers listed and attached with this tender and as approved by the PMC / the Architect and the University Engineer or their duly authorized assistant during execution of the work and to abide by decisions.

---

SIGNATURE OF CONTRACTOR

# ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT MADE \_\_\_\_\_ day of \_\_\_\_\_ BETWEEN THE EXECUTIVE OFFICER, UNIVERSITY hereinafter called the "EMPLOYER" of the ONE PART, AND

---

here in after called the "CONTRACTOR" of the OTHER PART.

WHEREAS the Employer in desirous of construction of Tender for "Supply & Installation, Commissioning & Testing work Annex to Examination House Passanger Lift . in University of Mumbai, Kalina Campus" & has caused drawings & specifications describing the works.

The Contractor hereby agrees to execute, carry out & complete the Supply & Installation ,commissioning ,testing of above of Lifts at Annex to Examination House Building building at University of Mumbai, Kalina Campus" The employer shall pay the contractor the sum shall become payable at the time and in the manner hereinafter specified in the contract.

The "Engineer-In-Charge" shall mean the engineer appointed by University for this job.

The said Articles of Agreement, special conditions, specification in general conditions of contract, standard specifications an all the papers attached hereto shall be read & construed as forming part of this agreement, and the parties hereto shall respectively abide by, submit themselves to the conditions and perform the agreements on their parts respectively in such conditions contained.

The said rates basis contract comprises all the work already mentioned in the said plans & specification and all subsidiary work connected therewith within the same drawing and specifications and as may be ordered to be done from time to time by the Architect, even though such work may not be shown in the drawings or described in said specifications and same shall become an extra only by obtaining necessary certificate of approval from the Archie before commencing any such work.

The owners undertake to pay the contractor the amount of the bills submitted by him duly certified by the Architects as per the schedule.

All disputes arising out or in any way connected with this Agreement shall be deemed to have arisen in Mumbai and only the Court at Mumbai shall have jurisdiction to determine the same.

Mobilization advance as per conditions of contract against Bank guarantee shall be paid to the contractor.

The contractor should clean the executed work to the entire satisfaction of the Architects / Engineer In charge before possession.

10.The lift proposed to be install above mention building are without machine room type, the financial offer to be submitted in your letter head.the quoted amount is inclusive of all taxa and as per specification attached herewith

A set of Architectural drawings is attached herewith.

The several part of this contract have been read and fully understood by me.

Detail Architectural & structural drawings shall be issued to the contractor progressively as per the construction programmer.

As witness our hands this \_\_\_\_\_ day of \_\_\_\_\_ 2016.

Signed by the Contractor.

\_\_\_\_\_  
\_\_\_\_\_

In the presence of:

1] \_\_\_\_\_

2] \_\_\_\_\_

Signed by Employer.

\_\_\_\_\_  
\_\_\_\_\_

In presence of

1] \_\_\_\_\_

2] \_\_\_\_\_  
\_\_\_\_\_

# **SPECIAL CONDITIONS**

1.0 Each page of the Tender document should be initially signed by the person or persons submitting the tender in token of his / their having acquainted himself / themselves with the General conditions of contract, special conditions, specifications, articles of agreement, schedule of quantities etc. as laid down. The tenders with any of the documents not so initially signed will be rejected.

The tender form must be filled in English and the rates quoted shall be in figures and words and in ink.

3.0 The erasures and alterations, if any, must be attested by dated initials of the tenderer with date. Overwriting is not allowed. No change in the rate after the opening of the tenders will be entertained.

Time shall be considered as the essence of the contract. The entire construction work included in this tender must be completed within Three ( 3 ) Calendar months from the date of commencement.

The successful tenderer is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the quantities and rates. The rate of such item shall be fixed by the Architect only.

The Tenderer is to attach to EMD equal to 1% of the contract value in the form of PO/DD drawn in favor of Finance & Account Officer, University of Mumbai and to be enclosed in the **ENVELOP NO. 1**. The **4%** of the contract value will be **deducted from the bill as a Retention Money Deposit** and the same will be returned on the expiry of the defect liability period of one year along with the EMD. The EMD amount does not carry any interest.

Income tax shall be deducted at 2% or may be at prevailing rate from every interim payment to the contractor as per prescribed rules.

## **DUTIES AND TAXES**

The tendered prices shall be inclusive of all taxes and duties applicable to the concerned work belonging to the Charitable Trust.

If it is Employer's duty to deduct any particular Tax & deposit into Government Treasury, in such cases "UNIVERSITY" shall deduct appropriate Tax & issue the Tax Deduction Certificate with prescribed limit to the contractor.

claim in respect of the works contractor tax, sales tax, excise duty, octroi duty or any other tax, duty or levy (if applicable) future taxation if revised or modified by the Government. shall be entertained by the Tenderer

## **ERRORS, OMISSION AND DISCREPANCIES:-**

a) In case of errors and / or disagreement between written and scaled dimensions on the drawing or between drawings and specifications etc. the following order of preference shall apply.

Between actual scaled and written dimensions or description on a drawing the latter shall be adopted.

Between the written or shown description of dimension in the drawings and corresponding in the specification, the latter shall apply.

Between the quantities shown in Schedule of Quantities and those arrived at from the drawings, the latter shall be preferred.

In case of discrepancy between item rate quoted in figures and words, the lowest of the Three will be considered for acceptance of tender.

In all cases of omission and / or doubts of discrepancies in the dimensions or description of the item or specification a reference shall be made to the Architects whose elucidation, elaboration or decision shall be considered as authentic. The Contractor shall be held responsible for any errors that may occur in the work through lack of such reference and precaution.

## **10. WEEKLY PROGRESS REPORTS**

The Contractor shall furnish all for compiling the progress reports in the standard proforma in triplicate, which

will be provided by the contractor at his own expenses and get approved from the Architect.

If the progress is not satisfactory then the Architect may stop the subsequent R.A. Bill and may deduct some fine, as he may find suitable, from his security deposit. The contractor shall submit the daily progress report of work in the prescribed form giving details of labour employed, material consumed and work done with approximate quantities. He shall submit monthly progress report carried out with approximate and approximate value of work executed during that week.

All such reports will be signed by the Architects / their representative. If the progress is not satisfactory repetitively for more than three weeks the architect may deduct some amount as fine from the R.A. bill.

### **INDEMNITY**

The Contractor shall indemnify the UNIVERSITY, Mumbai, Against all actions, suits, claims and demands brought or made against him in respect of anything done or committed to be done by the Contractor in execution of or in connection with the work of this contract and against damage to the UNIVERSITY, Mumbai, in consequences of any action or suit being brought against the contractor for anything done or committed to be done in the execution of the work of this contract limited upto 100% of the contract value.

### **WORKING METHODS AND PROGRESS SCHEDULE**

Progress schedule – The contractor shall furnish within 5days from the date of work order to start the work, a progress schedule in quadruplicate indicating the date of actual start, the monthly progress schedule in quadruplicate indicating the date of actual start, the monthly progress to be achieved and the anticipated completion date of each major item of work to be done by him, also indicating the dates of procurement of materials and setting up of plant and machinery. The schedule should be such as practicable of achievement towards the item if any on the due dates specified in the contact ad shall be operative without such acceptance in writing. Executive Officer is further empowered to ask for more detailed schedule or schedules say week by week, for any item or items I case of urgency of work as will be directed by him and the contractor shall supply the same as and when asked for. The contractor will be responsible for maintaining the progress according to schedule approved by the Architect. The progress schedule in the form of C.P.M. charts only will be accepted.

The contractor shall furnish sufficient plant, equipments and labour as may be necessary to maintain the progress schedule. The working and shift hours restricted to one shift a day for operations to be done under the UNIVERSITY, Mumbai, supervision shall be such as may be approved by the Architect. Night work which requires supervision shall not be permitted except when specifically allowed by Architect each time if requested by the contractor. The contractor shall provide necessary lighting arrangements etc. for nigh work as directed by Architect without extra cost.

Further the contractor shall submit the progress report of work in prescribed form, charts etc. at periodical intervals as may be specified by the Architect. Schedule shall be in the form of progress charts, forms, statements and / or reports as may be approved by the Architect.

The contractor shall maintain proforma, charts, details regarding machinery, equipment, labor materials, personnel etc. as may be specified by the Architect and submit periodical returns there of as may be specified by the Architect.

The prices offered are valid for a period of 12 months from the date of receipt of work order. Post this period, the prices will be mutually discussed and agreed upon.

### **FINAL BILL:**

The contractor should submit final bill within one month after virtual completion of the work and the same shall be paid within two months if it in order. Disputed items and claims if any, shall be excluded from the bill and settled separately later on.

Remittance for extra work or for any claim shall be paid separately apart from the interim remittance fro the main work. The payment of bills for the main work shall not be withheld for want of decision on the

extras or claims not covered in the appendices.

**TERMS OF PAYMENT:**

Contractor will be paid as detailed below:

30% advance payment against bank guarantee of equivalent amount valid till handing over the elevators

60% against material on site

Balance 10% after installation and handing over the elevators

**TEST REPORTS:**

The Contractor will submit quality control test reports prior to dispatch of material to site.

**PERSONNEL TRAINING**

After completion of handing over, the PURCHASER shall nominate maximum of two persons who will be responsible for handling of the Elevator/s. Such persons would be trained by our Installation Engineer

**20. MAINTENANCE**

This contract includes free maintenance for 12 months. The period of free maintenance will be deemed to have commenced on the date the Elevator handing over.

Maintenance will consist of regular examinations, any necessary adjustment and lubrication of the equipment by competent personnel under our direction and supervision.

All work will be performed during our regular working days except for minor emergency adjustment call back service which will be provided during regular working hours. No work or service other than that specifically mentioned is included or intended.

# **THE CONDITIONS OF CONTRACT**

## **Interpretation**

In constructing these Conditions, and the Specifications, Schedule of Quantities, and Contract Agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires.

“Employer” shall mean and shall include his (their) legal representative / s, assign / s, or successor / s.

“Contractor” shall mean and shall include his (their) legal representative / s, assign /s, or successor /s.

“Site” shall mean the site of the contracted works including any building and erections thereon and any other land (inclusively) as afore side allotted by the Employer for the Contractor’s use.

“This Contract” shall mean the Articles of Agreement, the conditions, the Appendix, the Schedule of Quantities and Specifications attached hereto and duly signed and the replies to the queries raised in the pretender meeting.

“Notice in writing” or “written notice” shall mean a notice in writing, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall deemed to have been received when in the ordinary course of post it would have been delivered.

iii) “Act of Insolvency” shall mean act of insolvency, as defined by The Presidency Towns Insolvency Act, or the Provincial Insolvency Act, or any Act amending such original.

iv. “New Prices : If in arriving at the Contract amount the Contractor shall have added to or deducted from the total of the items in the Tender any sum, either as a percentage or otherwise, then the net price of any item in the Tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the Tender as the price of that item a similar percentage or proportion of any Prime Cost items and Provisional Sum of money shall be deducted from the total amount of the Tender. The expression “net rates” or “net prices” when used with reference to the contract or accounts shall be held to mean rates or prices so arrived at.

## **Scope of Contract**

The contractor shall carry out and complete the said work in every respected accordance with this Contract and with the directions of and to the satisfaction of Architect, The Architect may in his absolute discretion and from time to time issue further Drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as the “Architect’s instructions”, in regard to:-

The variation or modification of the design, quality quantity of works or the addition or omission or substitution any work, the commercials pertaining to the changes implied will be mutually discussed and agreed upon.

Any discrepancy in the drawings or between the schedule of Quantities or quantities of work Drawings and / or specifications.

The removal from the site or any materials brought thereon by the contractor and the substitution of any other material therefore.

The removal and/or re-execution of any works executed by the Contractor.

The dismissal from the works of any persons employed thereon.

The opening up for inspection of any work covered up.

The amending and making good of any defects under Clause 19.

All compliances of all requirements, of all conditions of the tender.



The contractor shall forthwith comply with and duly execute any work comprised in such Architect's instructions provided always that oral instructions, directions, and explanations given to the Contractor or his representative upon the works by the Architect shall if involving a variation, be confirmed in writing within a further period of seven days by the Architect, such shall be deemed to be Architect's instructions within the scope of contract.

If compliance with the Architect's instructions as afore said involve work and/or expense and/or loss beyond that contemplated by the contract then unless the same work issued owing to some breach of this contract by the Contractor, the employer shall pay the contractor on the Architect's Certificate the price of the said work (as an extra to be valued here in after provided) and/or expense and/or loss.

### **Drawings & Schedule of quantities**

The contract shall remain in the custody of the Architect and shall be produced by him at his office as and when required by the Employer or the contractor. The Contractor on the signing thereof shall be furnished by Architect, free of cost with a copy of the priced schedule of quantities, one copy of each of the said drawings and of the specification and three copies of all further drawings issued during the progress of the works. Any further copies of such drawings required by the contractor shall be paid for by him. The Contractor shall keep one copy of all drawings on the works and the Architect or his representative shall at all reasonable times have access to the same. Before the issue of the Final Certificate to the contractor, he shall forthwith return to the Architect all Drawings and specifications.

### **Contractor to provide everything necessary**

The Contractor shall provide everything necessary for proper execution of the works according to the intent and meaning of the Drawings, Schedule of Quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the contractor finds any discrepancy in the drawings or between the drawings, Schedule of quantities and specifications, he shall immediately and in writing refer same to the Architect who shall decide which is to be followed.

DELETED

### **Setting out work**

The Contractor shall set out the works and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time any error in this respect shall appear during the progress of the works, the contractor shall at his own expense rectify such error so required to the satisfaction of the Architect.

### **Materials and workmanship to conform description**

All materials and workmanship shall, so far as procurable, be of the respective kinds described in the Schedule of Quantities and / or Specification and in accordance with the Architect's instructions and the contractor shall upon the request of the Architect furnish him with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The Contractor shall at his own cost arrange for and/or carry out the test of any materials which the Architect may require.

### **Contractor's super intendance and Responsibility on the works.**

The Contractor shall give all necessary, personal, upper intendance during the execution of the works, and as long thereafter' as the Architect may consider necessary until the expiration of the Defects Liability Period started in the Appendix hereto. The contractor shall also during the whole time the works are in progress employ a competent representative who shall be constantly in attendance at the building while the men are at work. Any directions, explanations, instructions or notices given by the architect to such representative shall be held to be given to the contractor. The names of the authorized representatives shall be informed to the Architect.

### **Dismissal of workmen :-**

The Contractor shall on the request of the Architect immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Architect, be incompetent or misconduct himself, and such;

person shall not be again employed on the works without the permission of the Architect.

If it is found suitable UNIVERSITY may appoint an engineer from their office who shall be acting as clerk of works.

### **Insurance in respect of damages to persons & property**

The Contractor shall be responsible for all injury to persons, animals or things, and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any nominated Sub-Contractor's employees, whether such injury or damage arise from carelessness, accident or any other cause whatever in any way connected with the carrying out of this contract. This clause shall be held to include, inter alia, any damage to buildings, whether immediately adjacent, or otherwise, and any damage to roads, streets, foot paths, bridges or ways as well as damage caused to the buildings and works forming the subject of this contract, by frost or other inclemency or weather. The Contractor shall indemnify the Employer

and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any award of compensation damages consequent upon claim.

The Contractor shall reinstate all damages of every sort mentioned in the Clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

The Contract shall indemnify the Employer against all claims which may be made against, the Employer by any member of the public or other third party in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense arrange to effect and maintain, until the virtual completion of the contract, with an approved Office a Policy of Insurance in the joint names of the Employer and the Contractor against such risks and deposit such Policy or Policies with the UNIVERSITY from time to time during the currency of this contract. The Contractor shall similarly indemnify the Employer against all claims which may be made upon the Employer whether under The Workmen's Compensation Act or any other Statute in force during the currency of this contract or at Common Law respect of any employee of the Contractor or any Sub-Contractor and shall at his own expense effect and maintain, until the virtual completion of the Contract, with an approved Office, Policy of Insurance in the Joint names of the Employee and the Contractor against such risks and deposit such policy or policies with the UNIVERSITY from time to time during the currency of the Contract.

The Contractor shall be responsible for anything which may be excluded from the Insurance Policies above referred to and also for all the damages to any property arising out of and incidental to the negligent or defective carrying out of this Contract. He shall also indemnify the Employer in respect of any, costs, charges and expenses arising out of any claim or proceedings and also in respect of any award of or compensation of damage arising there from.

The contractor shall at his own cost and expenses effect and maintain, a policy of insurance covering the risks of supervisory staff working on the site viz. Engineer-in-charge and his representative, Architects and their representatives and all other consultants who may work on the site from time to time, and at all times. The contractor shall lodge with the UNIVERSITY the policies and receipts of the premises for such insurance. Such insurance must be valid until the virtual completion of the works. The minimum value of the insurance shall be Rs. 5 lacs each.

### **Fire Insurance.**

The Contractor shall at the time of signing the Contract insure the works and keep them insured until virtual completion of the Contract against loss or damage by fire in the office to be approved by the University Engineer, in the joint names of the Employer and Contractor (the name of the former being placed first in the Policy) for the full amount of the Contract and for any further sum if called upon to do so by the Architect, the premium of such further sum being allowed to the Contractor as an authorized extra. Such Policy shall cover the property of the Employer only, fees for assessing the claim and in connection with his services generally therein, and shall

not cover any property of the Contractor or of any Sub-Contractor of employee. The Contractor shall deposit the policy and receipts for the premiums with the UNIVERSITY within twenty- one days from the date of signing the contract unless otherwise instructed by the Architect. In default of the Contractor insuring as provided above, the Employer or the Architect on his behalf may so issue and may deduct the premium paid from any money due or which may become due to the Contractor. The Contractor shall as soon as the claim under the Policy is settled, or the work reinstated by the Insurance Office, should they elect to do so, proceed

with all due diligence with the completion of the works in the same manner as though the fire had not occurred and in all respects under the same conditions of Contract, The Contractor, shall be entitled to such extension of time for completion as the Architect deems fit.

The amount so due as aforesaid shall be the total value of the works duly executed and of the Contract materials and goods delivered upon the site for use in the works up to and including a date not more than seven days prior to the date of the said Certificate less the amount to be retained by the Employer (as hereinafter provided.) and less any installment, previously paid under this Clause, Provided that such Certificates shall only include the value of the said materials and goods as and from time as they are reasonably, properly, and not prematurely brought upon the site and then only if properly stored and/or protected against weather.

Date of commencement and completion

The contractor shall be allowed admittance to the site on the "Date of Commencement" stated in the Appendix, and he shall thereupon and forthwith begin the works and shall regularly proceed with and complete same (except) such painting or other decorative work as the Architect may desire to delay) on or before the "Day of completion" stated in the Appendix subject nevertheless to the provisions for extension of time hereinafter contained.

The contractor shall complete the building in the allotted time. Earlier completion of the building shall be appreciated.

architect shall of itself be conclusive evidence that any works or materials to which it relates are in accordance with the Contract.

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

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

Payments upon the Architect's certificate shall be made within the periods named in the Appendix as "period of honoring of certificates" or to such certificates have been delivered to the Employer.

#### **Matters to be finally determined by the University Engineer**

The decision, opinion, direction, Certificate (except for payment) with respect to all or any of the matters under. Clauses 2a,2b,4,7,12,19, 28(a, b, c, d, f, and 30 hereof (which matters are herein referred to as the excepted matters ) shall be final and conclusive and binding on the parties hereto and shall be without appeal. Any other decision, opinion, direction, Certificate or valuation of the Architect or any refusal of the Architect to give any of the same shall be subject to the right of Arbitration and review in the same way in all respect (including the provision as to opening the reference)as if it were a decision of the Architect under the following clause.

#### **Settlement of dispute by Arbitration.**

All disputes and differences of any kind whatever arising out of or in connection with the contract or the carrying put of the works (whether during the progress before or after the determination, abandonment or breach of the Contract) shall be referred to and settled by the University Engineer, who shall state his decision in writing. Such decision may be in the form of a Final Certificate or otherwise. The decision of the Architect with respect of any of the excepted matters shall be final and without appeal as stated in preceding Clause. But if either the Employer or the Contractor be dismissed with the decision of the Architect on any matter, question or dispute of any kind (except any of the excepted matters) or as to the withholding by the Architect of any Certificate to which the Contractor may claim to be entitled, then and in any such case either party (the Employer or the Contractor) may within twenty-eight days after receiving notice of such decision, give a written notice to the other party through the Architect requiring that such matters dispute be arbitrated upon. Such written notice specify the matters which are in dispute and such dispute or difference of which such written notice has been given and no other shall be and is hereby referred to the Arbitrator being a Fellow of the Indian Institute of Architects to be agreed upon and appointed by both the parties or in case of disagreement as to the appointment of single Arbitrator, to be Arbitration of two Arbitrators both being Fellows of the Indian Institute of Architects, and to be appointed by each party, which Arbitrators shall before taking upon themselves the burden of re-reference appoint an Umpire.

There is a no clearance of arbitration. The decision of the Vice-Chancellor of the University of Mumbai is final.

Payment at part rates: - If the contractor fails to complete any item fully according to drawings and specification, but agrees to complete the same to the satisfaction of the Architect/Engineer-in-Charge at a later stage decided by the Architect/Engineer-in-Charge and the contractor demands payment for such item, then if the Architect/Engineer-in-Charge thinks fit, he can pay the contractor at part of the rates put to tender.

Action and compensation payable in case of bad work:- If any time before the security deposit or any part thereof is refunded to the contractor, it shall appear to the Architect/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 of a quality inferior to that contracted or are otherwise not in accordance with the contract. It shall be lawful for the Architect/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 may 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 provide 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 Architect/Engineer-in-Charge in 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 Architect/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 Architect/Engineer-in-Charge consider that any inferior work of 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 fix therefore.

DELETED

**Covering in work :**

The contractor shall give reasonable notice in writing to the Architect/Engineer-in-charge whenever any work is to be permanently covered up or concealed, whether by each or other means so that it can be finally inspected or measured if necessary. In default of so doing, the contractor shall, if required by the Architect/Engineer-in-charge, uncover such work at his own expense.

**Cleaning of site:**

No amount for cleaning of site shall be paid if it is necessary to clean. Final payment shall not be released unless the site is cleared of all the debris.

# SPECIFICATIONS

## 1. General :

Passenger Elevator, capacity of 10 Person ,680 Kg and complete the work as per the norms Public Work Department

## 2. Drawings :

Before commencing work, the Lift Contractor shall prepare and submit all drawings necessary to show the general arrangement of the Lift equipment. These drawings must be properly approved by the Architects before installation of the Lift and these drawings will become part of the Contract.

## 3. Painting :

All exposed metal work furnished in these specifications, except as otherwise specified, shall be properly spray-painted with good quality Nitrocellulose paint one coat at the Lift Contractor's Works over an anti-corrosive primer coat, and another two coats after installation.

## 4. Guarantee :

The Lift Contractor shall guarantee that the materials and workmanship of the apparatus installed by him under these specifications shall be first class in every respect. He will make good at his own cost any defects which may develop within one year from the date of commissioning of the installation, ordinary wear and tear and improper use excepted.

## 5. Works not included :

A Lift well properly framed and enclosed with suitable pit and head room, proper shaft enclosure, machine room properly lighted and ventilated with access door, etc., will be provided by the Employer. Also necessary electric feed wires and main switch in the machine room, and door openings will be provided by the Employer.

## 6. Works included :

Scaffolding necessary for erection, and all builder's work for all cutting away and making good to walls and masonry work required, including repairs to plaster, also all chases and openings as required by the Lift Contractor and shown on his drawings, will be done by the Lift Contractor. Machine Room R.S. beams and/or M.S. channels for support of Lift machinery and Buffers shall be supplied and reacted by the Lift Contractor. (Price for the builder's work and scaffolding mentioned herein and to be included in the quoted cost should also be separately indicated while quoting). Periodical inspection, servicing etc., to be done as indicated in Clause 25 of the Special Conditions.

Size and capacity : **(See separate schedule of details of Lifts attached).**

## Machine location and foundations :

The Lift machine shall be placed directly over the Lift-well mounted on structural beams provided by the Lift Contractor. These beams will be securely fastened to support which will also be provided.

## 9. Sound reduction :

The Lift Contractor shall provide necessary sound reducing materials, preferably rubber pads of proper density, to effectively isolate the machine from the machine beams or flooring.

## 10. Guides and fastenings :

(a) Guides for Car and counterweight shall consist of machined mild steel sections, erected plumb and

securely fastened to the Lift-well framing by heavy steel brackets. The guide rails shall be of suitable section with ends tongued and grooved, forming matched joint and shall be connected with steel fish plates.

(b) Guides shall be arranged to withstand the action of safety gear when stopping a counterweight or fully loaded car. Guides shall be of such length that it shall not be possible for any of the Cars or counterweight shoes to run off the guides.

#### 11. Machine :

The machine shall be of Gearless Permanent Magnet Synchronous motor , electro- mechanical brake and driving sheave mounted in proper alignment on a single cast iron or steel bed plate. Hoisting of machine will be inside the shaft and on guide rail.

#### 12. Hoist Motor :

The motor must be designed for arduous Lift duty, rapping reversal and constantly repeated starts. All winding must be heavily insulated, adequately impregnated for tropical climate and mechanically strengthened and must be specifically designed to have a high starting torque and low starting current characteristics. The bearing must be of Phosphor Bronze ring lubricated and frames of the enclosed ventilated type in accordance with P.S.168/1939. The motor shall be designed in such a way as to withstand occasional overloading of more than its rated capacity. The motor shall have a good speed regulation under different conditions of loads, and shall be designed to give a noiseless and vibration free operation. The motor must be suitable for 415 Volts, 50 Cycles, 3 Phase supply. The lighting supply will be 240 Volts, 50 Cycles A.C.

#### 13. Direct current brake supply :

A suitable bank of rectifiers or a motor generator set shall be provided to supply a source of direct current for Lift machine brake. Proper switching equipment shall be furnished to provide correct brake action.

#### 14. Driving sheave :

It shall be "Vee" grooved, to B.S.S. to suit the Main Hoisting Ropes, and shall be designed to ensure minimum rope wear.

#### 15. Controller :

Microprocessor based controller shall be provided to control starting, stopping and the speed of elevator motor.

It should have suitable memory system to monitor and take over the commands of the elevator.

It should have additional features as over current protection, Motor failure protection, Fast speed / De-acceleration protection, overload non-start, detection of stuck hall button, Auto fan on-off, etc.,

The controller should continuously monitor critical aspects of the system to speed up trouble-shooting and should be able to be monitored from segment displays in the logic board.

Protective device shall be provided to automatically apply the brake if any of the safety devices operated fails to operate or power supply fails from any cause. In the event of an earth fault with any gate open, the Lift shall not work.

No operation of a spring or springs in tension nor the completion of another electric circuit shall be depended upon to break the circuit to stop the Lift at terminal landings.

The interruption of the electrical circuit shall stop and/or prevent the movement of the Car. Adequate protection shall be provided on the controller to protect the Lift equipment against phase reversal, low voltage and phase failure.

No control system shall be used, which depends on the completion or maintenance of an electrical circuit for the interruption of the power supply and application of the electro mechanical brackets, when the Lift cage reaches the terminal floors.

The controller panel shall be floor mounting type with angle iron frame work and with best quality materials, self-adjusting and non-welding type, robust in construction and silent in operation.

A reverse phase relay shall be provided on the controller which is designed to protect the Lift equipment against phase reversal and failure.

16. The Lift shall be protected as follows:

Electrically against overload.

Safety gear on Car so that in the event of rope breaking or loosening the Car will be brought to rest immediately by means of grips on the guides.

Car gate lock so that in the event of Car gate being opened when passengers are in the Lift, the Lift will be brought to rest.

Speed governor operating the safety gear in case of overspending of Car in any direction.

17. The following tests shall be carried out to the satisfaction of the Architects/Owners: The necessary arrangements for testing to be made by the Contractor.

Insulation and earth test for all electrical apparatus.

Continuous operations of the Lift under full load conditions for one hour at the end of which time the temperature of the motor and the operating coils will be tested. This shall be as per I.S. Specifications.

The Car is to be loaded until the weight on the rope is twice the combined weight of the Car and the specified load. This load must be carried on for at least 30 minutes, without any sign of weakness, temporary set or permanent elongation of the suspension rope strands.

18. Automatic self-leveling :

The Lift shall be provided with a self- leveling feature that will automatically bring the Car to the flooring landing. This self-leveling shall within its zone, be entirely independent of the operating device and shall automatically correct overtravel as well as undertravel and maintain the Car level with the landing regardless of change in load affecting the stretch of the ropes.

An otp-reflector velocity transducer using reflective tape shall be provided on motor shaft to provide speed signal at all instants of elevator operation, thereby making it possible to electronically measure Car load and speed. With this data the micro-processor should be able to optimize the transition between fast and slow speed running of the elevator and determine the instant of brake application in such a manner that the flight time is reduced and stopping accuracy is virtually independent of passenger load.

19. Operation and control :

The Lift shall be single push button automatically control with operating devices consisting of a series of push buttons in the Car numbered to correspond to the various floors served with buttons at each landing. An emergency stop switch shall be provided in the Car to interrupt the power supply and apply the brake independently of the regular operating devices.

The Car operating device shall also include a switch for Car ventilator fan and an alarm button connected to a bell or buzzer to serve as emergency signal.

The system shall be so designed that a call shall be registered in the controller by momentary pressure on a landing button. The Car shall start automatically when the call is registered, provided the interlock circuits are established.

A time limit relay shall be provided and arranged to hold the Car at a landing at which it has stopped for a pre-determined period of time, unless the Car or landing door is held open, before it will again start automatically in response to other calls.

The operating panel in the Car shall contain a two position Key operated switch marked to indicate "With Attendant and Without Attendant", up and down direction light jewels and a buzzer. The key switch shall permit selection of the operation either "With" or "Without Attendant".

#### 20. Automatic terminal stops :

The Lift shall be equipped with an automatic stopping device, arranged to bring the Car to a stop at the terminal landing, independent of the regular operating device in the Car. Final limit switches shall be provided in the Lift-well operated by the Car and arranged to stop the Car and prevent normal operation, should it travel beyond the Zone of the normal stopping device.

#### 21. Car gate contact :

The Car gate shall be provided with an electric contact wired and connected complete, and arranged to prevent the operation of the Lift unless the gate is closed.

#### 22. Landing gate interlocks :

Each landing gate shall be equipped with an electro-mechanical interlock, operated by a retiring cam on the Car, which shall prevent the operations of the Lift unless all gates are closed and positively locked. The interlock shall also prevent the opening of any gate until the Car has reached the respective landing zone with the operating circuit open

#### 22A. Retiring cam :

For the operation of gate locks to be provided on the Lift Car (In case of manually operated doors).

#### 23. Guide shoes :

Steel tee guides shall be furnished for both Car and counterweight and for easy and smooth operation of the Lifts. The liners shall be highly wear resistant.

#### 24. Car frame, Safety & Governor :

The Car frame shall consist of steel channel top and bottom securely riveted or bolted and substantially reinforced and braced so as to relieve the Car enclosure of all strains when the safety comes into action due to over speed or when the capacity loaded car is run on the buffer springs at normal Lift speed.

The Car frame which supports the Car platform and enclosure, shall be made of structural steel and equipped with suitable guides and a Car safety device mounted underneath the Car platform. The hoist ropes will include adjustable self-sligning hitches.

The safety shall be mounted on the bottom members of the frame operated by a centrifugal speed governor located over the Lift- well and connected to the governor through a continuous steel rope. The safety device shall be arranged to bring the Car to a gradual stop on the guide rails in the event of excessive descending speed; and provision made to shut off the power supply to the Lift motor and apply the brake on application of the safety.

#### 25. Brakes :

When metal to metal contacts are used on the controller switches, for opening the main circuits, or for stopping a lift machine, at least two independent current brakes shall be incorporated in the design, each one shall hold full load. The direct current brake shall be spring applied and electrically released and designed to provide smooth stops under variable loads. The brakes shall be unaffected by overloads or temperature and shall hold load securely and positively when Lift stops. The brakes shall be highly wear resistant.

Winding drum and traction machines for Lift shall be equipped with the brakes applied automatically by means of springs in compression only when the operating device is in the "off" position or in the event of the power being cut off from any cause.

No single phasing, earth fault, short circuit or counter-electromotive force, shall prevent the brake from being applied normal operations.



#### 26. Buffers :

Spring buffers shall be installed as a means of stopping the Car and counterweight at the extreme limits of travel. Substantial spring buffers under Car and counterweight shall be furnished and installed. These buffers shall be mounted on continuous steel channels, fastened to the guide rails. The Car buffer springs must be of correct design to stay the Car with capacity load without damage, should the Car terminal limits become inoperative. The Car buffers must be located symmetrical with reference to centre of Car.

#### 27. Counterweight :

The Lift shall be suitably counter-balanced for smooth and economical operation. Cast iron weights shall be contained in a structural steel frame properly guided with suitable guide shoes. The counterweight shall be equal to the weight of complete Lift Car and about 40% of the specified load (appropriate filler weights) to provide smooth operation.

#### 28. Counterweight screens :

Substantial expanded metal counterweight screen guar 2.15 mtrs. high at the bottom of the Lift-well, shall be furnished and installed.

#### 29. Ropes :

The elevators shall be provided with traction steel hoist ropes conforming to I.S. 2365- 1963. Not less than 3 independent suspension ropes shall be used for Car or counterweight and the minimum dia. shall be 1.25 cm. The factor of safety of the combined suspension ropes shall not be less than 12, based on a static contract load plus the weight of Car and accessories. The ropes of the Car or of the counterweight shall not be repaired or lengthened by splicing.

#### 30. Hoisting rope equalizers :

To enable each hoisting rope to take equal load and wear, both ends of each hoisting rope shall be fastened to adjustable shackle rods with suitable equalizer springs.

#### 31. Car platform :

The Car platform shall be constructed of structural steel frame with double layer of Teak-wood flooring carried in the frame. The platform shall be equipped with a suitable threshold plate. The wooden platform shall consist of a top layer of 20 mm. tongued and grooved Teak -wood and a bottom layer of 45 mm. thick Teak-wood. The underside of the platform shall be covered with sheet steel. The platform shall be covered with heavy duty Bhor Vinyle tiles of approved design and colour.

The complete platform shall rest on Rubber pads of suitable density supported on an auxiliary steel frame which shall be fastened to the Car frame to provide sound isolation. This arrangement shall form an isolating cushion between the Car and the steel frame.

The complete platform shall be securely fastened to the Car frame to relieve the Car enclosure of all stresses. It shall be braced by four adjustable iron stay rods and securely fixed to the channel uptights of the Car frame.

#### 32. Car enclosure :

The Car enclosure for passenger Lifts shall be 4 cm. thick solid core blockboard with stainless steel interior.

A suitable cabin type ventilating fan and concealed tube light fixtures arranged as per Architects instructions located in approved positions, shall be fitted in the Car with an "OFF" switch in the Car operating panel for fan only. Wherever directed, a continuous door open bell system shall be provided.

#### 33. Electric Door Operator for Car Door and Hoist way Doors :

The Car door and the Hoist way door shall be power opened and power closed and will be checked in opening and closing with an oil cushioning mechanism built into the gear unit.

Each hoisting door shall be provided with an interlock which will prevent movement of the Car away from the landing until the doors are locked in the closed position as defined in the I.S.I. Codes.

An electric contact for the Car door will be provided which will prevent Car movement away from the landing unless the door is in closed position as defined in the I.S.I. Codes.

Necessary switches will be provided in the elevator machine room to control the operations of the doors. The Car door and Hoist way door will open automatically as the Car is stopping at a landing. The closing of the Car door and Hoist way door must occur before the Car can be started. Doors can be stopped and reversed during their closing motion.

#### 34. Door Hangers, Tracks and Safety Shoe :

Sleeve type two point suspension hangers complete with tracks shall be installed for the Car and each landing sliding door. Sheaves and rollers shall be of steel and shall include shielded ball bearing to retain grease lubrication. Adjustable ball bearing rollers to be provided to take the upward thrust of the doors. Tracks shall be of suitable steel section with smooth surface.

Two safety shoes - one on each side - shall extend the full height of the door and project beyond the front edge of the Car door. Should this shoe touch a person or object while the Car door is closing, the Car and Hoist way doors shall return to the open position. The doors will remain open until the expiration of a pre-determined interval and then close automatically.

Reversal of the doors may be accomplished by pressing the 'open door' button in the Car operating panel.

#### 35. Hall buttons with position indicator (For Duplex Control) :

These signal fixtures shall be provided on the terminal and intermediate landings of a group of two elevators (duplex collective control) and located between the two entrances. Modern digital readouts should provide passengers with clear, easy-to-read information on the position of the two Lift Cars.

#### 36. Car operating panel and Car position indicator :

The Car operating panel with hinged stainless steel face plate shall have illuminated floor buttons, door-open and emergency stop controls and integral interphone for the convenience and safety of Lift passengers. The interphone shall have links with the Lift machine room at terrace and security room at ground floor. The jewels and actuators shall be of modular construction, being face plate mounted and pre-wired using snap-on lugs to facilitate easy installation and maintenance.

The Car position indicator should be compact and should have stainless steel face plate, digital display and illuminated direction arrows.

#### 37. Erection :

The Lift Contractors shall commence the erection of the Lift equipment immediately after receipt of the complete equipment and complete the work to the satisfaction of the Architects and Owner within the stipulated time. The Lift installation shall be handed over in perfect working order on completion of the work.

#### 38. Electric Wiring :

Complete necessary insulated wiring to connect all parts of the equipment shall be furnished and installed. Insulated wiring shall have a flame retarding and moisture resisting outer cover and shall be run in a metal conduit.

Trailing cables between Car and Lift well shall be PVC sheathed Copper co

for Lift service and shall have flame retarding and moisture resisting outer cover. They shall be flexible and shall be suitably suspended to relieve strains in the individual conductors. Independent light flexible wires will not be accepted. All conductors shall be suitable gauge Copper conductors to obviate excess voltage drop. All insulated conductor and conduit or tubing, as well as fittings including metal boxes, trough and ducts shall comply with the requirements of relevant I.S. Specification and / or B.S. Specification.

### 39. Car entrance openings :

In all Lifts the counterweights shall be directly opposite to the Car entrance and shall be fixed on to machined 'T' Section. All Car and landing entrances shall be as wide as possible.

### 40. General :

Contractors must strictly comply with the above specifications and if there are any variations these shall be separately listed.

All civil and electrical works connected with the installation of the Lift are included in the scope of work and no extra payment will be made to the Contractor in this regard.

### 41. Scope of work for contractor

Dismantling of existing elevators.

Civil work required for dismantling and reinstallation of elevator including scaffolding.

Electrical wiring including bulkhead fixing.

Liasioning work including permission and license with Fees will be contractor scope of work.

**Manner of submission of Tender and its accompaniments:**

The tender to be submitted in two separate sealed envelopes. Tenderer shall submit the tender and documents in two sealed envelopes as below:

**.1 Envelope No.1 (Documents):**

The first envelope clearly marked as 'Envelope No.1' shall contain the following documents:

- (a) Certificate as a Registered Contractor with the Government of Maharashtra (True copy thereof duly attested by Gazetted Officer).
- (b) Detail of other works tendered For and In Hand with the value of work unfinished on the last date of submission of tender. The certificates from the Head of the Offices under whom the works are in progress should be enclosed.
- (c) A list of machinery and plants immediately available with the tenderer for use of this work.
- (d) Details of works of similar type and magnitude carried out by the contractor.
- (e) Detail of Technical Personnel on the rolls of the tenderer
- (f) Proof of appointment of employees including technical personnel by way of valid professional tax registration certificate in form PTR/under section (i) of section 5 of Maharashtra Sales Tax as profession, trade, callings of employment act, 1975, rule 3(2) from the professional tax officer of the concerned district in Maharashtra. (In original or duly attested by Gazetted Officer)  
The contractor(s) shall not be allowed to tender, if he fail to produce this certificate.
- (g) Attested copy of partnership deed if the tenderer is a partnership firm and Power of attorney if the tenderers are a firm or a company, they should in their forwarding letter mention the names of all the partners together with the name of the person who holds the power of attorney authorizing him to conduct all transactions on behalf of the body, along with the tender.
- (h) Bank guarantee DETAILS according to **TERMS OF PAYMENT** conditions please refer on page regarding to page 11
- (i) Last three years Income Tax Return states
- (j) Forwarding letter.

**.2 Envelope No. 2 (Main Tender):**

The second envelope clearly marked as 'Envelope No.2' shall contain only the main tender, including the common set of conditions/stipulations issued by the department and signed by the contractor after the pretender 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/ percentage of estimated rates at the appropriate place of tender documents, to be **submitted only in Envelope No. 2**. He should **not quote his offer any where 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 Department as informed to him by a letter from University Engineer.

**3.3 Submission of Tender:**

- i) The two sealed envelope No.1 and 2 shall be again put together in one common cover and sealed. This sealed cover shall be marked on the left hand top corner "Tender for the work of....."
- ii) The full name and address of the tenderer shall be written on the bottom left hand corner. If submitted by post of sealed envelope marked as above, shall be enclosed in another cover properly addressed and shall be sent by Registered Post Acknowledgment Due. The date and time for receipt of envelope containing tender shall strictly apply in all cases. The tenderers should ensure that their tender is received by the University Engineer, Campus Development Unit, Room No.118, First Floor, University of Mumbai, Fort, Mumbai before the expiry of the date and time.  
No delays on account of any cause will be entertained for the late receipt of the tender. Tender offered or received after the due 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.
- iii) All zerox copies submitted in connection with tender shall be attested by Gazetted officer of Public Works Department of irrigation Department only. Otherwise their tender will not be considered for further action and Envelope No.2 will be not opened.

\_\_\_\_\_  
EMPLOYER'S SIGNATURE.

\_\_\_\_\_  
CONTRACTOR'S SIGNATURE.

University of Mumbai



UEV/80DYE/1012/279/2016.  
Fort -campus, Mumbai-400032  
Date:- 15/06/2016

**Tender Notice.**

The Registrar, University of Mumbai ,Fort-400032 invites wax sealed tenders from experienced and competent Lift Manufacturer for "Supply, Installation , commissioning and Testing of one new Passengers lifts at Annex to Examination House Building (CAP Building) In University of Mumbai at Kalina Campus .The details about tenders are mention below & you are requested to submit your Financial offer in your letter Head along with all Necessary documents on or before 22<sup>nd</sup>June 2016 at 3.00 pm, to the University Engineer office, RN- 118, University of Mumbai, Fort Campus & Tender will be open on same day at 3.00 pm, if possible.

The Register, University of Mumbai has reserves the right to reject all or any tender without assigning any notice. And his decision will be legally bind to all tendrer.

Sd/-

The Registrar  
University of Mumbai



## **TENDER NOTICE**

To,  
The Tendor.

**Sub:** - Notice Inviting Tenders for Supply & Installation ,Commissioning & Testing work of Annex to Examination House Passenger Lifts In University of Mumbai, Kalina Campus.

Dear Sir,  
Sealed tenders (Percentage rate) are invited by The Registrar of University of Mumbai, for Proposed Supply Installation, Commissioning & testing work above Lift for University of Mumbai, at Kalina Campus. The work is to be carried out according to Specification and terms and conditions of this tender document.

### **Specification of Schedule B :-**

<b>Project Name</b>	<b>Annex to Examination Building PASSENGER ELEVATOR</b>
Model	Passenger Elevator
Capacity	10 Person ,680 Kg
Quantity	01 no.
Speed	0.65
Type of drive	3V V F
Machine room	Required
Location of machine	Above Hoistway
Travel	23 M
Serving	5 Stop
Opening	5Opening
Floors	5 Stop
Well size required	2000 x 2000mm
Car size	1200 x1500
Car enclosure	S.S. Hairline Finish
Flooring	P V C
Electric light	4NOS. LED Lights
Fan	Blower
Car door	S.S Centre opening Stainless Steel, Hairline Finish
Landing doors	S. S Centre opening Stainless Steel, Hairline finish
Clear opening	900 X 2000mm
Operation	Automatic
Control	Full collective
Indicator (Car & landing)	Digital Direction & Position scrolling type
Features	Signal Fixture in stainless steel face plate
	Inverter based Emergency Light
	Car Handle
	Fire Men Drive
	Automatic Rescue Device
Headroom	4800mm
Pit Depth	1600mm
<b>Note</b>	<b>1) Required Paper to Complete the PWD formalities will be done by the Tendor/Agency on their own credit .</b>
	<b>2) Tendor /Agencies have requested to submit their Wax sealed tenders to the University of Mumbai without any conditions .&amp; Conditional tenders will be rejected without any notice</b>

Total Amount in Rs:- \_\_\_\_\_  
(Incl. of all Taxes )

University Engineer  
University of Mumbai