



BRIHANMUMBAI MUNICIPAL CORPORATION

Chief Engineer (Mechanical & Electrical)

Draft-Tender

FOR

Sub: Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.

e-Tender No.- 7200040472

BRIHANMUMBAI MUNICIPAL CORPORATION

GSTIN NO.27AAALM0042L3Z4

Website: portal.mcgm.gov.in/tenders

Office of: Chief Engineer (Mechanical & Electrical),
Engineering Hub Building, Dr. E. Moses Road,
Worli Naka, Worli, Mumbai- 400 018.

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SECTION 1
E-TENDER NOTICE

BRIHANMUMBAI MUNICIPAL CORPORATION

Chief Engineer (Mechanical & Electrical)

No. Ch. Eng./ M & E/ 4360 Dated 23.11.2022

e- Tender No.- 7200040472

e-TENDER NOICE

Subject: Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.

The Municipal Corporation of Greater Mumbai (MCGM) invites e-tender to appoint Contractor for the aforementioned work from contractors of repute, multidisciplinary engineering organizations i.e. eminent firm, Proprietary/Partnership Firms/ Private Limited Companies/ Public Limited Companies/Companies registered under the Indian companies' act 2013, the contractors registered with the Municipal Corporation of Greater Mumbai, (MCGM) in Mechanical and Electrical class 'A' as per new registration 2016 and from the contractors / firms equivalent and superior classes registered in Central or State Government/Semi Govt. Organization/Central or State Public Sector Undertakings, will be allowed subject to condition that, the contractors who are not registered with MCGM will have to apply for registering their firm within three months time period from the award of contract, otherwise their Bid Security i.e. E.M.D (Earnest Money Deposit) will be forfeited/recovered and an amount equal to Registration Fee of respective class will be recovered as penalty.

Bidding Process will comprise of THREE stages.

The application form can be downloaded from MCGM's portal (<http://portal.mcgm.gov.in>) on payment of **Rs.3,000/- (Including 18.00% GST)**. The applicants not registered with MCGM are mandated to get registered (Vendor Registration) with MCGM for e-tendering process & obtain log in credentials to participate in the online bidding process.

To download the application form, for those applicants not having vendor registration, need to apply first for vendor registration at the office of Central Purchase Department (CPD), 566, N.M.Joshi Marg, Byculla (West), Mumbai-400 011.

- i) Followed by SRM log in ID and password to be obtained from Central Purchase Department (CPD), 566, N.M.Joshi Marg, Byculla (West), Mumbai-400 011.
- ii) For e-Tendering registration, enrollment for digital signature certificates and user manual, please refer to respective links provided in 'Tenders' tab. Vendors can get digital signature from any one of the Certifying Authorities (CA's) licensed by controller of certifying authorities namely, Safes crypt, IDRBT, National informatics center, TCS, CUSTOMS, MTNL, GNFC and e- Mudhra CA.

Name and location of work	Contract period	Estimated Cost of Project
Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai Bid No. 7200040472	5 Months	Item Rate Tender

In terms of the 3 stage system of e-tendering, a Bidder will be required to deposit, along with its Bid, an **Earnest Money Deposit** (the "EMD") of **Rs.27,100/-** (Rs.Twenty seven thousand one hindered only), refundable in accordance to the relevant clause of bid document, from the Bid Due Date, except in the case of the selected Bidder whose Bid Security/EMD shall be retained. The Bidders will have to provide Earnest Money Deposit through the payment gateways while submitting the bids. The Bid shall be summarily rejected if it is not accompanied by the Earnest Money Deposit. The e-tender is available on MCGM portal (<http://portal.mcgm.gov.in>) as mentioned in the Header Data of the tender.

As per THREE Packet systems, the document for Packet A & B is to be uploaded by the bidder in vendors' document online in Packet A, B. Packet A, B & C shall be opened on dates as mentioned in header data. All the responsive and eligible bidders if they so wish can be present at the time of opening of bids, in the office of Chief Engineer (M&E). The Packet C shall be opened if bids submission in Packet A & B satisfies/includes all the requirements and same are found acceptable to the Authority.

The Municipal Commissioner reserves the right to reject all or any of the e- tender(s) without assigning any reasons at any stage.

The dates and time for submission and opening the bids are as shown in the Header Data. If there are any changes in the dates the same will be displayed on the MCGM Portal. (<http://portal.mcgm.gov.in>).

The Applicants interested for the above referred works may contact the Chief Engineer (Mechanical and Electrical) at the following address on any working day during office hours.

Office of: Chief Engineer (M & E), MCGM

1st Floor, Engineering Hub Building,

Dr. E. Moses Road, Worli Naka,

Worli, Mumbai- 400 018,

The applicants may wish to visit the site under reference located at KEM Hospital, Parel and can collect the information of the present status from the department who has invited the bids.

The MCGM reserves the rights to accept any of the application or reject any or all the application received for above works, without assigning any reasons thereof. The information regarding above subject matter is available on Website of MCGM. (<http://portal.mcgm.gov.in/tenders>)

Sd/-
Ex.Engr.Mech.(E.I.)Const.

Header Data

Tender Document No	7200040472
Name of Organization	Brihanmumbai Municipal Corporation
Subject	Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai
Cost of Tender	Rs.3,000/- (plus 18.00% GST).
Cost of E-Tender (Estimated Cost)	Item rate tender.
Bid Security Deposit/ EMD	Rs. 27,100 /-
Date of issue and sale of tender	24.11.2022 from 11:00 Hrs
Last date & time for sale of tender & Receipt of Bid Security Deposit	12.12.2022 upto 16:00 Hrs
Submission of Packet A&B (Online)	12.12.2022 upto 16:00 Hrs.
Pre-Bid Meeting	Not applicable
Opening of Packet A	14.12.2022 after 16:00 Hrs
Opening of Packet B	14.12.2022 after 16:02 Hrs.
Opening of Packet C	26.12.2022 after 15:00 Hrs.
Address for communication	Office of the:- Ch. E. (M & E), MCGM, 1 st floor, Engineering Hub Building, Dr. E. Moses Road, Worli Naka, Worli,Mumbai-400 018
Venue for opening of bid	On line in Ch. Eng. (M & E)'s office.

This tender document is not transferable.

The MCGM reserves the rights to accept any of the application or reject any or all the application received for above subject without assigning any reason thereof.

SECTION 2
ELIGIBILITY CRITERIA

Ch. Engr .(Mech. & Elect.) Department.

Subject: Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai

Technical Capacity

The Approved lift manufacture in their own name should have satisfactorily executed the work of similar nature MCGM /Semi Govt. /Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

Authorized firms of above qualified lift manufacturers shall submit experience certificates of their own firm or of Approved lift manufacture authorized to them.

a)Three similar completed works each of value not less than the value equal to Rs.5.40 Lakh

OR

b) Two similar completed works each of value not less than the value equal to Rs. 6.76 Lakh.

OR

c) One similar completed work of value equal and or not less than the Rs.10.81 Lakh.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

Approved Lift manufacturer-

- 1) M/s. Jhonson lifts Pvt. Ltd
- 2) M/s Otis Elevator Company (India) Limited
- 3) M/s. Kone Elevator India (P) Ltd
- 4) M/s/ Escon Elevator Pvt. Ltd.
- 5) M/s. Eros Elevators & Escalators Pvt. Ltd.
- 6) M/s. Schindler India Pvt. Ltd.
- 7) M/s. Thyssen Krupp Elevators India Pvt. Ltd.
- 8) M/s. Eskay Elevator (I) Pvt. Ltd.
- 9) M/s. Trio Elevators Co. (India) Ltd.
- 10) M/s. Omega Elevators

Or

Authorized firms of above qualified lift manufacturers, Authorized firm shall submit the Manufacturer's authorization certificate in prescribed format (Given in SBD).

1.2 Similar Experience:

Similar work shall mean Supply, installation, testing & commissioning of Passenger Lift (Performance certificate from user shall be uploaded.)

Note: The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.

Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or

- Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc

SECTION 3
DISCLAIMER

DISCLAIMER

The information contained in this e-tender document or provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of the Municipal Corporation of Greater Mumbai (MCGM), hereafter also referred as “**The Authority**“, or any of its employees or advisers, is provided to Applicant(s) on the terms and conditions set out in this e-tender and such other terms and conditions subject to which such information is provided.

This e-tender includes statements, which reflect various assumptions and assessments arrived at by the Municipal Corporation of Greater Mumbai (MCGM) in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. This e-tender may not be appropriate for all persons, and it is not possible for the Municipal Corporation of Greater Mumbai (MCGM), its employees or advisers to consider the investment objectives, financial situation and particular needs of each party who reads or uses this e-tender. The assumptions, assessments, statements and information contained in this e-tender may not be complete, accurate, adequate or correct. Each Applicant should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this e-tender and obtain independent advice from appropriate sources.

Information provided in this e-tender to the Applicant(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Municipal Corporation of Greater Mumbai (MCGM) accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed here.

The Municipal Corporation of Greater Mumbai(MCGM), its employees and advisers make no representation or warranty and shall have no liability to any person, including any Applicant or Bidder, under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this e-tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the e-tender and any assessment, assumption, statement or information contained therein or deemed to form part of this e-tender or arising in any way with pre-qualification of Applicants for participation in the Bidding Process. The Municipal Corporation of Greater Mumbai (MCGM) also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Applicant upon the statements contained in this e-tender.

The Municipal Corporation of Greater Mumbai (MCGM) may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this e-tender.

The issue of this e-tender does not imply that the Municipal Corporation of Greater Mumbai (MCGM) is bound to select and short-list pre-qualified Applications for Bid Stage or to appoint the selected Bidder or Concessionaire, as the case may be, for the Project and the Municipal Corporation of Greater Mumbai (MCGM) reserves the right to reject all or any of the Applications or Bids without assigning any reasons whatsoever.

The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by The Municipal Corporation of Greater Mumbai (MCGM) or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and the Municipal Corporation of Greater Mumbai (MCGM) shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the Bidding Process.

SECTION 4
INTRODUCTION

INTRODUCTION

S Background:

The Municipal Corporation of Greater Mumbai covers an area of 437.71sq.kms.with a population of **1.24 Crores as per census of 2011**. The metropolis accounts major portion of India's international trade and government's revenue, from being one of the foremost centers of education, science and technological research and advancement.

The Mumbai Metropolis has historic tradition of strong civic activism dedicated to the cause of a better life for all its citizens. And it's the Municipal Corporation of Greater Mumbai (MCGM), hereafter called the "**Corporation**", the primary agency responsible for urban governance in Greater Mumbai.

MCGM (**The Authority**) is one of the largest local self-governments in the Asian Continent. In observance of historic traditions of strong civic activism, with the change in time and living conditions to match with the urbanization, MCGM has mainly focused in providing almost all kinds of engineering services viz, Hydraulics, storm water drain, sewerage, water supply projects, roads, bridges, solid waste management, and environmental services. Beside this, the MCGM is also providing dedicated services in various segments such as Health, Primary Education as well as the construction and maintenance of Public Markets and Slaughter Houses.

MCGM is an organization having different departments, right from engineering _epts.. To health _epts.. Moreover we have other dept. like education, market, fire brigade dept., Octroi and other such departments where quite a good number of staff members are working.

Scope of Work:

MCGM is primarily an organization, which in the interest of citizens and with the speed of urbanization deals with the variety of the infrastructure services and delivered to the public by different departments like Water Supply Projects, Sewerage Projects, Hydraulics, Storm Water Drain/Roads and bridges and Building Construction etc.

The SITC of Lift work and allied electrical works shall be carried out as per M&E USOR 2018 and fair item schedule or as per manufacturer's standard. The work covered by these specifications comprises of "Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai" as stated in Schedule of Quantities.

"Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai" along with lighting of lift shaft, earthing of lift equipment, cabling, painting & all the associated civil works necessary to complete the work in all respect.

Above job include entire procedure of obtaining all necessary erection permission and “license to work the Lift” from Electrical Inspector (Lifts) with submission to the Engineer In charge.

Warrantee – Job covers three years (3 years) Defect liability period from the completion date. 2 years CSMC contract after completion of 3 years Defect liability period.

SECTION 5
E-TENDERING ONLINE SUBMISSION PROCESS

E-TENDERING ONLINE SUBMISSION PROCESS

The terminology of e-Tendering is solely depending upon policies in existence, guidelines and methodology adopted since decades. The SRM is only change in process of accepting and evaluation of tenders in addition to manual. The SAP module to be used in this E-tendering is known as Supplier Relationship Module (SRM).SRM is designed and introduced by ABM Knowledge ware Ltd. Who will assist MCGM in throughout the tendering process for successful implementation.

NOTE: This tendering process is covered under Information Technology ACT & Cyber Laws as applicable

In e-tendering process some of the terms and its definitions are to be read as under wherever it reflects in online tendering process.

Start Date read as “Sale Date”

End Date read as “Submission Date”

Supplier read as “Contractor/bidder”

Vendor read as “Contractor/bidder”

Vendor Quotation read as “Contractors Bid/Offer”

Purchaser read as “Department/MCGM”

Before entering in to online tendering process, the contractors should complete the registration process so as to get User ID for E-tendering links. For this, the contractors can access through Supplier registration via MCGM Portal.

There are two methods for this registration ☺ II and III)

I.Transfer from R3 (registered contractors with MCGM) to SRM

- a. Contractors already registered with MCGM will approach to Vendor Transfer cell.
- b. Submit his details such as (name, vendor code, address, registered Email ID, pan card etc.) to Vendor transfer cell.
- c. MCGM authority for Vendor Transfer, transfers the Vendor to SRM application from R3 system to SRM system.
- d. Transferred Vendor receives User ID creation link on his supplied mail Id.
- e. Vendor creates his User ID and Password for e-tendering applications by accessing link sent to his mail ID.

II. Online Self Registration (Temporary registration for applicant not registered with MCGM)

- a. Vendor fills up Self Registration form via accessing MCGM portal.

- b. Vendor Transfer cell (same as mentioned above) accesses Supplier Registration system and accepts the Vendor request.
- c. Accepted Vendor receives User ID creation email with Link on his supplied mail Id.
- d. Vendor creates his User ID and Password for e-tendering application.

III.CONTRACTORS BIDDING: Applicant will Quote and Upload Tender Documents

1. Access e-tender link of SRM Portal
2. Log in with User ID and Password
3. Selects desired Bid Invitation (he wants to bid)
4. To download tender documents contractors will have to pay online Tender fee. The same can be done by accessing Pay Tender Fees option. By this one will be able to pay Tender fee through Payment Gateway-If transaction successful, Contractors can register his interest to participate. Without Registration one cannot quote for the Bid/Tender.
5. Applicant will download Tender Documents from Information from purchaser tab by accessing Purchaser document folder through collaboration 'C' folder link.
6. Applicant will upload Packet **A** related and Packet **B** related Documents in Packet **A** and Packet **B** folder respectively by accessing these folders through "My Notes" Tab and collaboration folder link.
7. All the documents uploaded have to be digitally signed and saved. Contractors can procure there digital signature from any certified CA's in India.
8. Bid security deposit/EMD and ASD, if applicable, should be paid online as mentioned in tender.
9. For commercial details (in Packet **C**) contractors will fill data in Item Data tab in Service Line Item via details and quotes his "Percentage Variation" (i.e.% quoted) figure.(If entered '0' it will be treated as at par. By default the value is zero only.
10. Applicants to check the bid, digitally signs & save and submit his Bid Invitation.
11. Applicants can also save his uploaded documents/commercial information without submitting the BID for future editing through 'HOLD' option.
12. Please note that "Hold" action do not submit the Bid.
13. Applicants will receive confirmation once the Bid is submitted.

14. Bid creator (MCGM) starts Bid Opening for Packet A after reaching End Date and Time and Bid Evaluation process starts.

As per Three Packet system, the documents for Packet A & B are to be uploaded by the tenderer in 'Vendor's document' online in Packet A & B. Before purchasing/ downloading the tender copy, tenderer may refer to post- Qualification criteria mentioned in e-Tender Notice.

The tenderer shall pay the EMD/Bid Security through payment gateways before submission of Bid and shall upload the screenshot of receipt of payment in Packet 'A' instead of paying the EMD at any of the CFC centers in MCGM Ward Offices.

The e-tender is available on MCGM portal, <http://portal.mcgm.gov.in>, as mentioned in the Header Data of the tender. The tenders duly filled in should be uploaded and submitted online on or before the end date of submission. The Packet 'A', Packet 'B' & Packet 'C' of the tenderer will be opened as per the time-table shown in the Header Data in the office of **Ch.E.(M&E), MCGM, 1st floor, Engineering Hub Building, Dr. E. Moses Road, Worli Naka, Worli, Mumbai-400018.**

The Municipal Commissioner reserves the right to reject all or any of the e-Tender(s) without assigning any reason at any stage. The dates and time for submission and opening the tenders are as shown in the Header Data. If there are any changes in the dates the same will be displayed on the MCGM Portal (<http://portal.mcgm.gov.in>).

SECTION 6
INSTRUCTIONS TO APPLICANTS

INSTRUCTIONS TO APPLICANTS

➤ Scope of Application

The Authority wishes to receive Applications for Qualification in order to SELECT experienced and capable Applicants for the Bid Stage.

➤ Eligibility of Applicants

The Municipal Corporation of Greater Mumbai (MCGM) invites e-tender to appoint Contractor for the aforementioned work from contractors of repute, multi-disciplinary engineering organizations i.e. eminent firm, Proprietary / Partnership Firms / Private Limited Companies / Public Limited Companies / Companies registered under the Indian companies' act 2013, the contractors registered with the Municipal Corporation of Greater Mumbai, (MCGM) in **Mechanical and Electrical class 'A' as per new registration 2016** and from the contractors/firms equivalent and superior classes registered in Central or State Government/Semi Govt. Organization/Central or State Public Sector Undertakings, will be allowed subject to condition that, the contractors who are not registered with MCGM will have to apply for registering their firm within three months' time period from the award of contract, otherwise their Bid Security i.e. E.M.D (Earnest Money Deposit) will be forfeited/recovered and an amount equal to Registration Fee of respective class will be recovered as penalty.

To be eligible for pre-qualification and short-listing, an Applicant shall fulfill the following conditions of eligibility:

Technical Capacity

The Approved lift manufacture in their own name should have satisfactorily executed the work of similar nature MCGM /Semi Govt. /Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

Authorized firms of above qualified lift manufacturers shall submit experience certificates of their own firm or of Approved lift manufacture authorized to them.

a) Three similar completed works each of value not less than the value equal to

Rs. 5.40 Lakh

OR

b) Two similar completed works each of value not less than the value equal to

Rs.6.76 lakh

OR

c) One similar completed work of value equal and or not less than the Rs. 10.81 lakh

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

1.2 Similar Experience:

Similar work shall mean, the completed work of Supply, installation, testing & commissioning of Passenger Lift/ Hospital lift . (Performance certificate from user shall be uploaded).

Note: The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.

Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc

D. Equipment Capabilities as required for this work

- a) **Regular and Routine works:** The successful bidder will make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge However, this condition in no way shall dilute the respective condition in Registration Rules of MCGM.

E. Technical Personnel

(A) General Guidelines for Fixing Requirement of Technical Staff

Cost of work (Rs in Crore)	Requirement of Technical Staff		Minimum Experience (year)	Designation
	Qualification	Number		
Up to 1.5	S Graduate Engineer	1	2	Principal Technical Representative
	or Diploma Engineer	1	5	Project/Site Engineer/ Billing Engineer

Notes-

1. "Cost of work", in table above, shall mean the agreement amount of the work.

2. Rate of recovery in case of non-compliance of the clause be stipulated at following rates:-

Sr. No	Qualification	Experience(years)	Rate of Recovery
1	Project Manager with degree	10	Rs.30000/-p.m.
2	Graduate Engineer	5	Rs.25000/-p.m.
3	Graduate Engineer	2	Rs.15000/-p.m.
4	Diploma Engineer	5	Rs.15000/-p.m.

F. TIME PERIOD OF THE PROJECT:

Entire project should be completed and delivered within **05 Months** of time from the date of award of contract (Including Monsoon) and on receipt of PWD work permission and handing over of lift shaft i.e, site clearance to work, which ever is later. The contract period will be calculated from the day above, which ever is later, whether the contractor already delivered the material at site.

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 PWD work permission is obtained by the contractor and lift shaft is handed over to contractor by MCGM. The work shall throughout the stipulated period of the Contract be proceeded with all due diligence as time being deemed to be the essence of the contract on the part of the Contractor. On failing to do so, the Contractor shall pay as compensation an amount which shall be governed as per Clause – 8(e) of Standard General Conditions of Contract.

The Contractor should complete the work as per phase given below:

¼ of the work in	.. ¼ of the time
½ of the work in	.. ½ of the time
¾ of the work in	.. ¾ of the time
Full of the work in	.. Full of the time

Full work will be completed in **05 Months** including monsoon.

The programme for completion of work shall be a part of the Contract Document in the form of Bar Chart / GANTT Chart. The Contractor is supposed to carry out the work and keep the progress as per Bar Chart/GANTT Chart. The Contractor shall complete the work as per the Schedule given in the Contract and the programme submitted by the Contractor.

G. Contract Execution

~~All required documents for execution of the contract shall be submitted within 30 days from the date of issue of letter of acceptance. If the documents are not submitted within the stipulated time a penalty of **Rs 5000/- per day** will be applicable to the contractor. All contract documents need to be duly~~

~~affixed with stamp duty properly signed along with evidence/proof of payment of security/contract deposit/ within 30 days from the date of letter of acceptance received by him. (Deleted)~~

~~-If the amount of the Contract Deposit to be paid above is not paid within 30 days from the date of issue of Letter of Acceptance, the Tender / Contractor already accepted shall be considered as canceled and legal steps be taken against the contractor for recovery of the amounts. (Deleted)~~

The amount of Security Deposit retained by the MCGM shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete the rectification work within the period up to which the contractor has agreed to maintain the work in good order, the amount of security deposit retained by MCGM shall be adjusted to-wards the excess cost incurred by the Department on rectification work.

H. Action when whole of security deposit is forfeited:

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 installments or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause, the Engineer on behalf of the Municipal Commissioner shall have power to adopt any of the following process, as he may deem best suited to the interest of MCGM

(a) To rescind the contract (for which recession notice in writing to the contractor under the head of Executive Engineer shall be conclusive evidence) and in that case, the security deposit of the contract shall stand forfeited and be absolutely at the disposal of MCGM.

(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 un-executed part of the work completed and crediting him with the value of the work done departmentally in all respects 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 Executive 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.

I To order that the work of the contractor be measured up and to take such part thereof as shall be un-executed 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 Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the un-executed 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 there for actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing the performance of 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 contractors amount of excess shall be deducted from any money due to the contractor, by MCGM under the contract or otherwise, howsoever, or from his security deposit or the sale proceeds thereof provided, however, the contractor shall have no claim against MCGM 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 clauses (a), (b) or (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchase or procured any materials or entered in to any engagements or made any advance on account of or with a view to the execution of the work or the performance of the contract.

Contract may be rescinded and security deposit forfeited for bribing a public officer or if contractor becomes insolvent

If the contractor assigns or sublets his contracts or attempt so to do, or become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any composition with his creditors, or attempt so to do 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 through any public officer, or person in the employ of MCGM/Govt. in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract the Engineer In-charge 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 MCGM and the same consequences shall ensure as if the contract had been rescinded under above clause J hereof; and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

➤ **Submission of Tenders**

PACKET – A

The Packet 'A' shall contain scanned certified copies of the following documents-

Scrutiny of this packet will be done strictly with reference to only the scanned copies of Documents uploaded online in packet 'A'

- a) Valid Registration Certificate.
- b) Valid Bank **Solvency Certificate** of Minimum Solvency amount **Rs.8.00 Lakh** as governed by Registration Rules in force for respective Class of Contractor for Civil and M&E works.

- c) A document in support of Registration under Maharashtra GST Act. GST Registration Certificate in Maharashtra (or equivalent requirement under GST). Those not registered in Maharashtra shall submit an undertaking to the effect that if they are successful tenderer, they shall submit Goods and Services Registration Certificate in Maharashtra within 15 days of issue of work order, failing which payment for the work executed will not be released.
- d) Certified copies of valid 'PAN' documents and photographs of the individuals, owners, Karta of Hindu undivided Family, firms, private limited companies, registered co-operative societies, partners of partnership firms and at least two Directors, if number of Directors are more than two in case of Private Limited Companies, as the case may be. However, in case of Public Limited companies, Semi Government Undertakings, Government Undertakings, no 'PAN' documents will be insisted.
- e) Latest Partnership Deed in case of Partnership firm duly registered with Chief Accountant (Treasury) of MCGM.
- f) **If tenderer is authorized firm, the Authorization certificate from the manufacturer in prescribed format shall be submitted on 500/Rs. Stamp paper.**

The bidders shall categorically provide their Email-ID in packet 'A'.

NOTE:

- If the tenderer(s) withdraw tender offer during the tender validity period, his entire E.M.D shall be forfeited.
- If it is found that the tenderer has not submitted required documents in Packet "A" then, the shortfalls will be communicated to the tenderer through e-mail only and compliance required to be made within a time period of **three working days** otherwise they will be treated as non-responsive.
- **PACKET – B**

The Packet 'B' shall contain scanned certified copies of the following documents –

- a) The list of similar type of works as stated in para 'A' of Post qualification successfully completed during the last five years in prescribed proforma, in the role of prime contractor. Information furnished in the prescribed proforma (Proforma –III) shall be supported by the certificate duly self-attested. Documents stating that it has successfully completed during the last five years at least one contract of similar works as stated in para 'A' of Post qualification.
- b) Documents stating that, it has access to or has available liquid assets, unencumbered assets, lines of credit and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements for the subject contract in the event of stoppage, start-up, or other delay in payment, of the minimum 15% of the cost of the work tendered for, net of the tenderer's commitment of other contracts (Certificate from Bankers / C.A./Financial Institution shall be accepted as a evidence).
- c) Technical schedules I to VIII, duly filled shall be uploaded.

i) Regular and Routine works: The successful bidder shall make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as

per the instructions of site in charge. However, this condition in no way shall dilute the respective condition in Registration Rules of MCGM.

Note: Insistence of availability of equipments/plants at a particular distance from site should not be made in the tender document.

The undertaking of **Rs.500/-** stamp paper as per the Proforma annexed in ‘Annexure B’ & ‘C’.

iii) The tenderers shall upload work plan as per the following outline:

1. GANTT chart/ PERT/ CPM chart showing the completion of work within prescribed time period, considering major activities.
2. Organizational set up envisaged by the contractors.
3. Equipment proposed to be deployed for this work.
4. A note on how the whole work will be carried out (work plan including methodology).
5. Quality management plan.
6. All the activities included in the Scope of Work shall be covered in the work plan.

Note:

The Electrical / Mechanical work shall be got carried out by the civil contractors through the contractors registered with MCGM in Electrical Category. Information about the registered contractors shall be obtained from the office of the Ch.E. (M&E)/ E.E. (Monitoring & Registration Cell). Attested scanned copy of the valid registration certificate in Electrical Category shall be uploaded with the tender along with the undertaking from the registered Electrical Contractor stating his willingness to carry out the tender work.

ii. The successful bidder shall submit valid registration certificate under **E.S.I.C., Act 1948**, if the tenderer has more than 10 employees /persons on his establishment (in case of production by use of energy) and 20 employees/persons on his establishment (in case of production without use of energy) to MCGM as and when demanded. In case of less employees/persons mentioned above then the successful bidder has to submit an undertaking to that effect on Rs. 200 stamp paper as per circular u/no. CA/FRD/I/65 of 30.03.2013.

iii. The successful bidder shall submit valid registration certificate under E.P.F. & M.P., Act 1952, if tenderer has more than 20 employees/persons on his establishment, to MCGM as and when demanded. In case if the successful bidder has less employees/persons mentioned above then the successful bidder has to submit an undertaking to that effect on Rs. 200 stamp paper as per circular u/no. CA/FRD/I/44 of 04.01.2013.

iv. The bidder shall disclose the litigation history in Packet ‘B’ under the head “Details of Litigation History”

If there is no Litigation History, the bidder shall specifically mention that there is no Litigation History against him as per the clause of Litigation History. In case there is Litigation History,

Litigation History must cover – Any action of blacklisting, debarring, banning, suspension, degradation and cheating with MCGM, State Govt., Central Govt. or any authority under State or Central Govt./ Govt. organization initiated against the company, firm, directors, partners or authorized signatory

shall be disclosed for last 5 years from the date of submission of bid. Also, bidder must disclose the litigation history for last 5 years from the date of submission of bid about any action like show cause issued, blacklisting, debarring,

banning, suspension, deregistration and cheating with MCGM and MCGM is party in the litigation against the company, firm, directors, partners or authorized signatory for carrying out any work for MCGM by any authority of MCGM and the orders passed by the competent authority or by any Court where MCGM is a party. While taking decision on litigation history, the concerned Chief Engineer or D.M.C. or Director, as may be the case, should consider the details submitted by bidder and take decision based on the gravity of the litigation and the adverse effect of the act of company, firm, directors, partners or authorized signatory on the MCGM works which can spoil the quality, output, delivery of any goods or any work execution and within the timeframe.”

Note:

If it is found that the tenderer has not submitted required documents in Packet “B” then, the shortfalls will be communicated to the tenderer through **e-mail only** and compliance required to be made within a time period of **three working days** otherwise they will be treated as non-responsive.

PACKET – C

For Packet ‘C’ tenderer(s) will fill data in ‘Item Data Tab’ in Service Line Item

BID SECURITY OR EMD

The Bidder shall furnish, as part of the Bid, Bid Security/EMD, in the amount specified in the Bid Data Sheet. This bid security shall be in favor of the authority mentioned in the Bid Data Sheet and shall be valid till the validity of the bid.

The tenderers shall pay the EMD online instead paying the EMD at any of the CFC centers in MCGM Ward Offices

In case of rejection of tender, EMD amount will be transferred to wallet instead of transferring to account.

Any bid not accompanied by an acceptable Bid Security and not secured as indicated in sub-clause mentioned above, shall be rejected by the Employer as non-responsive.

The Bid Security of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the required Security Deposits.

The Bid Security/ EMD of L-3 and bidder shall be refunded immediately after open-ing of financial bid but, the EMD/ASD submitted by the L-2 bidder will be returned after obtaining Standing Committee Resolution.

The Bid Security may be forfeited:

if the Bidder withdraws the Bid after bid opening (opening of technical qualification part of the bid during the period of Bid validity;

b. in the case of a successful Bidder, if the Bidder fails within the specified time limit to:

I. sign the Agreement; and/or

ii. Furnish the required Security Deposits.

1. The cases wherein if the shortfalls are not complied by a contractor, will be informed to Registration and Monitoring Cell. Such non-submission of documents will be considered as '**Intentional Avoidance**' and if three or more cases in 12 months are re-reported, shall be viewed seriously and disciplinary action against the defaulters such as banning/de-registration, etc. shall be taken by the registration cell with due approval of the concerned AMC.
2. No rejections and forfeiture shall be done in case of curable defects. For non-curable defects the 10% of EMD shall be forfeited and bid will be liable for rejection.
3. Note: Refer latest circular and modify curable and non-curable list.

A. Curable Defect shall mean shortfalls in submission such as:

i. Non-submission of following documents,

- **Valid Registration Certificate**
- **Valid Bank Solvency amounting to Rs. 8 Lakh.**
- **GST Registration Certificate (GST)**
- **Certified Copies of PAN documents and photographs of individuals, owners, etc**
- **Partnership Deed and any other documents**
- **Undertakings as mentioned in the tender document.**
- **Litigation History**

B. Non-curable Defect shall mean

- a. **In-adequate submission of EMD/ASD amount,**
- b. **In-adequacy of technical and financial capacity with respect to Eligibility criteria as stipulated in the tender.**
- c. **Wrong calculation of Bid Capacity,**
- d. **No proper submission of experience certificates and other documents, etc.**

BID VALIDITY

- **Bids shall remain valid for a period of not less than one eighty (180) days after the deadline date for bid submission specified in Bid Data Sheet. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.**

- In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for a period of the extension.

DEFECT LIABILITY PERIOD (DLP)

- The Contractor is expected to carry out the construction work in Workmen like manner so as to meet the requirement and specification for the project. It is expected that the Workmanship and materials will be reasonably fit for the purpose for which they are required.
- Defects or defective work is where standard and quality of workmanship and materials as specified in the contract is deficient. Defect is defined as a failure of the completed project to satisfy the express or implied quality or quantity obligations of the construction contract. Defective construction works are as the works which fail short of complying with the express descriptions or requirements of the contract, especially any drawings or specifications with any implied terms and conditions as to its quality, workmanship, durability, aesthetic, performance or design. Defects in construction projects are attributable to various reasons.
- Some of the defects are structural defects results in cracks or collapse of faulty defective plumbing, inadequate or faulty drainage system, inadequate or faulty ventilation, cooling or heating systems, inadequate fire systems etc. The defects could be various on accounts of different reasons for variety of the projects.
- The Engineering In charge/Project Officer shall issue the practical completion certificate for the project. During the Defect Liability Period which commences on completion of the work, the Engineering In charge shall inform or the contractor is expected to be informed of any defective works by the Employer's representative of the defects and make good at contractor's cost with an Intention of giving opportunity to the contractor of making good the defects appeared during that period. It is the contractor's obligation under the contract to rectify the defects that appear during Defect Liability Period and the contractor shall within a reasonable time after receipt of such instructions comply with the same at his own cost. The Engineering In charge/Project Officer shall issue a certificate to that effect and completion of making good defects shall be deemed for

all the purpose of this contract to have taken place on the day named in such defect liability certificate.

- If defective work or workmanship or design have been knowingly covered-up or conceived so as to constitute fraud, commencement of the Defect Liability Period may be delayed. The decided period may be delayed until **discover** actually occurs on at least the defect could have been discovered with reasonable diligence, whichever is earlier.
- The DLP shall be as below:

Dept	Type of works	DLP
M & E Department	Lift work	3 Years.

- Also, in case of defect, the Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at. The Defects Liability Period shall be extended for as long as Defects remain to be corrected. Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice. The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.
- It is the Completion Stage when the contractor has completed all of the works and fixed all of the defects that were on the list of issue by Engineer-in-charge. When this happens, the engineer must issue a '**Certificate of Completion**'. On the issue of 'Certificate of Completion', the 'Defect Liability Period' starts. The contractor also must issue a '**Certificate statement**' as an acknowledgment to the engineer not later than 14 days after the 'Certificate of Completion' has been issued. During the 'Defect Liability Period', the contractor has to obey all written instructions from the engineer to carryout repairs and fix any defects which appear in the Permanent Works. If the contractor does not, due to his own faults finish the repair works or fix the defects by the end of '**Defect Liability Period**', the '**Defect Liability Period**' will continue until all works instructed by engineer is done.
- **SECURITY DEPOSIT AND PERFOMANCE GUARANTEE**

C. **Security Deposit**

The security deposit shall mean and comprise of

A] Contract Deposit

The successful contractor shall submit Bank Guarantee as follows-

- i) Separate bank guarantee of 2% of contract cost for SITC of Elevator works shall be provided at the time of completion of work.

ii) Separate bank guarantee of 2% of contract cost for CSMC works shall be provided at the time of start of CSMC work of elevator.

a) Separate 2% security deposit for individual elevator is also allowed. Similarly the BG valid up to end of DLP of individual elevator on Prorata basis is also allowed.

b) As per stamp duty Act stamp duty of Rs.500/- is applicable, if contract amount does not exceed Rs. 10 lakh,

Where it exceeds Rs.10 lakh, stamp duty of 0.5 % will be applicable to all the bank guarantee submitted and same shall be renewed if required.

B] Retention Money- Not applicable for M&E works.

D) Refund of Security Deposit.

S Refund of Contract Deposit

The Contract Deposit shall be released within 30 days after issue of 'Defect Liability Certificate' (3 years DLP) subject to no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor. No claim shall be made against the Balance Contract Deposit after the issue of Defects Liability Certificate.

Summary of time of Refund of deposit is tabulated as follows:

S Time of Refund for works having 3 years DLP

After Completion of 3 years DLP
Security deposit (BG) i.e. 2 % of contract cost for SITC of Elevator works will be release after successfully completion of 3 years of DLP

b. Time of Refund for works 2 years CSMC

After Completion of 2 years CSMC
Security deposit (BG) i.e. 2 % of contract cost for CSMC works will be release after completion of the work of CSMC.

*Note:

- It shall be clearly mentioned that the BG shall be applicable for individual work/contract and clubbing of various contracts of the said contractor will not be allowed. In case of obtaining Bank Guarantee, it is necessary to mention that the same shall be valid further 6 Months from the completion of defect liability period/ warranty period.
- It shall be the responsibility of the bidder to keep the submitted B.G. "VALID" for the stipulated time period in the tender & in case of its expiry it will attract penalization.
- Bank Guarantee should be issued by way of General Undertaking and Guarantee issued on behalf of the Contractor by any of the Nationalized or Scheduled banks or branches of foreign banks operating under Reserve Bank of India regulations located in Mumbai up to Virar & Kalyan. List of approved Banks is appended at the end of Instructions to Bidders (ITB). The Bank Guarantee issued by branches of

approved Banks beyond Kalyan and Virar can be accepted only if the said Bank Guarantee is countersigned by the Manager of a Regional Branch of the same bank within the Mumbai City Limit categorically endorsing thereon that the said Bank Guarantee is binding on the endorsing Branch of the Bank or the Bank itself within Mumbai Limits and is liable to be enforced against the said Branch of the Bank or the bank itself in case of default by the Contractors furnishing the Bank Guarantee. The Bank Guarantee shall be renewed as and when required and/or directed from time to time until the Contractor has executed and completed the works and remedied any defects therein.

D) Legal + Stationary Charges: (As per applicable circular)

Successful tender shall pay the Legal Charges + Stationary charges as per Circular no. 10318 dtd. 24.03.2022

Contract Value					Legal + Stationery Charges
Rs.	50,001/-	To	Rs.	1,00,000/-	Rs.6290/-
Rs.	1,00,001/-	To	Rs.	3,00,000/-	Rs. 10380/-
Rs.	3,00,001/-	To	Rs.	5,00,000/-	Rs.12470 /-
Rs.	5,00,001/-	To	Rs.	10,00,000/-	Rs. 14510/-
Rs.	10,00,001/-	To	Rs.	20,00,000/-	Rs. 16570/-
Rs.	20,00,001/-	To	Rs.	40,00,000/-	Rs. 18660/-
Rs.	40,00,001/-	To	Rs.	1,00,00,000/-	Rs. 20720/-
Rs.	1,00,00,001/-	To	Rs.	10,00,00,000/-	Rs. 24450/-
Rs.	10,00,00,001/-	To	Rs.	20,00,00,000/-	Rs. 28,220/-
Rs.	20,00,00,001/-	To	Rs.	30,00,00,000/-	Rs. 31,980/-
Rs.	30,00,00,001/-	To	Rs.	40,00,00,000/-	Rs. 35,740/-
Rs.	40,00,00,001/-	To	Rs.	50,00,00,000/-	Rs. 39,470/-
Rs.	50,00,00,0001/-	To	Rs.	1,00,00,00,000/-	Rs.47,000/-

The tenderers are requested to note that stationary charges as given in the table above will be recovered from the successful tenderer for supply of requisite prescribed forms for preparing certificate bills in respect of the work.

E) Stamp Duty: (As per applicable circular)

It shall be incumbent on the successful renderer to pay stamp duty on the contract.

- i. As per the provision made in Article 63, Schedule I of Bombay Stamp Act 1958, stamp duty is payable for “works contract” that is to say, a contract for works and labour or services involving transfer of property in goods (whether as goods or in some other form) in its execution and includes a sub-contract, as under :

(a)	Where the amount or value set forth in such contract does not exceed rupees ten lakhs.	Five Hundred rupees stamp duty
(b)	Where it exceeds rupees ten lakh	Five hundred rupees plus 0.1% of the amount above rupees ten lakh subject to maximum of rupees twenty five lakh only.

- ii.** The successful bidder shall enter into a contract agreement with M.C.G.M. within 30 days from the date of issue of Work Order and the same should be adjudicated for payment of Stamp Duty by the successful bidder.
- iii.** Further shortfall if any, in amount of stamp duty paid as against prescribed amount for the documents executed in Mumbai City & Mumbai Suburban District be recovered from the concerned work contractors and to deposit the deficit or unpaid Stamp Duty and penalty by two separate Demand Draft or Pay Order in favor of “Superintendent of Stamp, Mumbai” within 15 days from intimation thereof.
- iv.** All legal charges and incidental expenses in this respect shall be borne and paid by the successful tenderer.

IMPORTANT DIRECTIONS

1. All the information uploaded shall be supported by the corroborative documents in absence of which the information uploaded will be considered as baseless and not accepted for qualification criteria. All the documents shall be uploaded with proper pagination. The page No. shall be properly mentioned in the relevant places.

The information shall be uploaded in the sequence as asked for with proper indexing etc. The Bidder shall be fully responsible for the correctness of the information uploaded by him.

2. Applicants/Bidders shall refer portal.mcgm.gov.in/tenders for “The Manual of Bid-Submission for Item Rate Tender Document.” The detail guidelines for creation and submission of bid are available in the referred document.

Any queries or request for additional information concerning this TENDER shall be submitted by e-mail to eemecheiconst.me@mcgm.gov.in The subject shall clearly bear the following identification/ title: **“Queries/ Request for Additional Information: < Name of the Tender >**

3. Any changes in mail id will be intimated on the portal any queries or request for additional information concerning this tender shall be submitted by e mail to eemecheiconst.me@mcgm.gov.in The subject shall clearly bear the following identification/title:”Quesries/Request for additional information: TENDER for “Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai” Any changes in mail ID will be intimated on the portal.

SECTION 7
SCOPE OF WORK

SCOPE OF WORK

MCGM is primarily an organization, which in the interest of citizens and with the speed of urbanization deals with the variety of the infrastructure services and delivered to the public by different departments like Water Supply Projects, Sewerage Projects, Hydraulics, Storm Water Drain/Roads and bridges and Building Construction etc.

The SITC of Passenger cum stretcher Gear less Lift work and allied electrical works shall be carried out as per M&E USOR 2018 / as per manufacturer's standard and fair item schedule. The work covered by these specifications comprises of "Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai" as stated in Schedule of Quantities.

"Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai" along with lighting of lift shaft, earthing of lift equipment, cabling, painting & all the associated civil works necessary to complete the work in all respect,

Above job include entire procedure of obtaining all necessary erection permission to install the lift and "license to work the Lift" from **Electrical Inspector (Lifts)** with submission to the Engineer In charge.

Warrantee – Job covers three years (3 years) Defect liability period from the completion date on prorated basis.

2 years CSMC contract after completion of 3 years Defect liability period.

The tenderer shall upload the license from PWD / Ch.E.(Electrical) P.W.D. to install, operate and Maintain the lifts.

The Bidder shall consider / include following charges while quoting the charges for the SITC work of Lift.

- 1) Total cost of 1.1 KV grade stranded Cu conductor, XLPE insulated, extruded PVC inner and FRLS outer sheathed, galvanized steel round or strip armoured Power and lighting cables of required capacities and length.**
- 2) Total cost of required switch gears of all the capacity.**
- 3) The Successful contractor shall provide polished natural stones tiles 18 mm thick Ruby red / Jet black / Hasan green granites along the opening of the lift doors at all the floors by maintaining aesthetic look.**
- 4) 3 years (Three years) Defect liability period charges after commissioning the lift.**

SECTION 8
BILL OF QUANTITIES

Projection of Estimated Cost:

Sr. No.	Description	Unit	Rate/Unit including GST in Rs.	Regd Qty.	Total Amount in Rs. Including GST@18 %
1	Removal of Passenger cum stretcher Lift of 16 p - 1020 kg. capacity, Gr.+2 floors.	No.		1	
2	SITC of 1 no. of passenger cum stretcher Lift (Bed Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+ 2 floors), 3 stops with 3 years DLP and with all accessories as per Technical Specifications	No.		1	
3	Power Cable of size 4C x 6 SQ MM	MTR		100	
4	Cable End Termination for 4C x 6 SQ MM	SET		2	
5	2 C x 2.5 Sq MM cable for Lightening	MTR		100	
6	Cable End Termination for 2C x 2.5 SQ MM	SET		2	
7	Providing & fixing polished natural stone tiles as specified below of approved quality, pattern	SQM		60	
	CSMC charges for Passenger Lifts with gear less machine for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai for 2 years after completion of 3 years free defect liability period (DLP)				
8	CSMC charges for 1 st yr	No.		1	
9	CSMC charges for 2 nd yr	No.		1	
10	Rebate for 16 Passenger Lift of 168 Bedded building (Gr.+2 floors) at Kasturba Hospital.	No.	41,410.00	1	41410.00

Note- 1) This is for Reference only. Rates are to be filled separately in “Item data Tab” in service line item. (Packet C).

2) Rebate on old Lift material is fixed of Rs. 41,410/-, However, Bidder can quote on higher side.

Projection of Estimated Cost:

Sr. No.	Short Description	Long description
1	Rem. of 16 pass. lift Gr.+2 floors 148 Bldg.	Removal of Passenger Lift (16 P - 1020 kg capacity) for Gr. + 2 floors.
2	SITC of 15 Pass. lift Gr.+ 2 (1020 kg capacity) floors 168 bedded Bldg	S.I.T.&C. of passenger lift with 'gearless' machine (15 persons - 1020 kg capacity) at 168 Bedded Building , Kasturba Hospital (Gr. + 2 floors),3 stops, with three years of defect liability period as per technical specifications.
3	Power Cable of size 4C x 6 SQ MM	Power Cable of size 4C x 6 SQ MM
4	Cable End Termination for 4C x 6 SQ MM	Cable End Termination for 4C x 6 SQ MM
5	2 C x 2.5 Sq MM cable for Lightening	2 C x 2.5 Sq MM cable for Lightening
6	Cable End Termination for 2C x 2.5 SQ MM	Cable End Termination for 2C x 2.5 SQ MM
7	Providing & fixing polished natural stone tiles as specified below of approved quality, pattern	Providing & fixing polished natural stone tiles as specified below of approved quality, pattern
8	CSMC charges for 15P lift for 1st year	CSMC charges for Passenger Lift with gearless machine (15P-1020 kg capacity) at 168 bedded bldg, Kasturba Hospital ,3 stopes, for first year after completion of 3 years free defect liability period
9	CSMC charges for 15P lift for 2nd year	CSMC charges for Passenger Lift with gearless machine (15P-1020 kg capacity) at 168 bedded bldg, Kasturba Hospital ,3 stopes, for second year after completion of 3 years free defect liability period
10	Rebate for 16 Passenger Lift.Floors-Gr.+2 floors, 148 bedded bldg, 3 stopes	Rebate for 15 Passenger Lift at 168 Bedded Building (Gr.+ 2 floors) , 3 Stopes, kasturba Hospital,

SECTION 9
GENERAL CONDITIONS OF CONTRACT

General Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

The “Contract” shall mean the tender and acceptance thereof and the formal agreement if any, executed between the Contractor, Commissioner and the Corporation together with the documents referred to therein including these conditions and appendices and any special conditions, the specifications, designs, drawings, price schedules, bills of quantities and schedule of rates. All these documents taken together shall be deemed to form one Contract and shall be complementary to one another.

The Contract Data defines the documents and other information which comprise the Contract.

The “Contractor” shall mean the individual or firm or company whether incorporated or not, whose tender has been accepted by the employer and the legal successor of the individual or firm or company, but not (except with the consent of the Employer) any assignee of such person.

The Bidder is a person or corporate body who has desired to submit Bid to carry out the Works, including routine maintenance till the tender process is concluded.

The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.

The “Contract Sum” means the sum named in the letter of acceptance including Physical contingencies subject to such addition thereto or deduction there-from as may be made under the provisions hereinafter contained.

Note: The contract sum shall include the following –

- In the case of percentage rate contracts the estimated value of works as mentioned in the tender adjusted by the Contractor's percentage.
- In the case of item rate contracts, the cost of the work arrived at after finalization of the quantities shown in schedule of items / quantities by the item rates quoted by the tenderers for various items and summation of the extended cost of each item.
- In case of lumpsum contract, the sum for which tender is accepted.
- Special discount / rebate / trade discount offered by the tenderer if any and accepted by the Corporation.
- Additions or deletions that are accepted after opening of the tenders. **The “Contract Cost”** means the Contract Sum plus Price Variation. This cost shall be included in the letter of acceptance.

A Defect is any part of the Works not completed in accordance with the Contract.

The Defects Liability Certificate is the certificate issued by the Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.

Drawings means all the drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation & maintenance manual and other technical information of like nature submitted by the Contractor and approved by the Engineer.

The Authority shall mean Municipal Corporation of Greater Mumbai (MCGM)

The “Employer” shall mean the Municipal Corporation for Greater Mumbai / Municipal Commissioner for Greater Mumbai, for the time being holding the said office and also his successors and shall also include all “Additional Municipal Commissioners, Director (Engineering Services & Projects)” and the Deputy Municipal Commissioner, to whom the powers of Municipal Commissioner, have been deputed under Section 56 and 56B of the Mumbai Municipal Corporation Act.

The Engineer in-charge shall mean the Executive Engineer in executive charge of the works and shall include the superior officers of the Engineering department i.e. Dy.Ch.Eng/Ch.Eng. and shall mean and include all the successors in MCGM

The Engineer's Representative shall mean the Assistant Engineer, Sub. Engineer/Jr. Engineer in direct charge of the works and shall include Sub Eng./ Jr. Eng of Civil section/ Mechanical section/ Electrical section appointed by MCGM.

The “Engineer” shall mean the Chief Engineer, appointed for the time being or any other officer or officers of the Municipal Corporation who may be authorized by the commissioner to carry out the functions of the Chief Engineer or any other competent person appointed by the employer and notified in writing to the Contractor to act in replacement of the Engineer from time to time.

Contractor’s Equipment means all appliances and things of whatsoever nature required for the execution and completions of the Works and the remedying of any defects therein, but does not include plant material or other things intended to form or forming part of the Permanent Works.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

The Intended Completion Date is the date on which it is intended that the Contractor shall complete the construction works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works and works of routine maintenance.

Plant is any integral part of the Works that shall have a mechanical, electrical, electronic, chemical, or biological function.

Routine Maintenance is the maintenance of activities of the completed structure for five years as specified in the Contract Data.

The “Site” shall mean the land and other places including water bodies more specifically mentioned in the special conditions of the tender, on, under in or through which the permanent works or temporary works are to be executed and any other lands and places provided by the Municipal Corporation for working space or any other purpose as may be specifically designated in the contract as forming part of the site.

Site Investigation Reports are those that were included in the bidding documents and are reports about the surface and subsurface conditions at the Site.

“Specification” shall mean the specification referred to in the tender and any modification thereof or addition or deduction thereto as may from time to time be furnished or approved in writing by the Engineer.

The Start Date/Commencement Date- date of start of work shall be on receipt of PWD work permission and handing over of lift shaft.

A Nominated Sub-Contractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the construction work and/or routine maintenance in the Contract, which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

Variation means a change to the:-

- i. Specification and /or Drawings (if any) which is instructed by the Employer.
- ii. Scope in the Contract which is instructed by the Employer.
- iii. Price in the Contract which is instructed by the Employer.

The Works, as defined in the Contract Data, are what the Contract requires the Contractor to construct, install, maintain, and turn over to the Employer. Routine maintenance is defined separately.

1. Jurisdiction: In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about these Conditions of Contract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following documents: (1) Agreement, (2) Letter of Acceptance, (3) Notice to Proceed with the Work , (4) Contractor's Bid, (5) Contract Data, (6) Special Conditions of Contract Part (7) General Conditions of Contract Part I, (8) Specifications, (9) Drawings, (10) Bill of Quantities, and (11) Any other document listed in the Contract Data.

3. Engineer's Decisions

- 3.1 Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer. However, if the Engineer is required under the rules and regulations and orders of the Employer to obtain prior approval of some other authorities for specific actions, he will so obtain the approval, before communicating his decision to the Contractor.
- 3.2 Except as expressly stated in the Contract, the Engineer shall not have any authority to relieve the Contractor of any of his obligations under the contract.

4. Delegation

- 4.1 The Engineer, with the approval of the Employer, may delegate any of his duties and responsibilities to other person(s), except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

5. Communications

All certificates, notices or instructions to be given to the Contractor by Employer/ Engineer shall be sent on the address or contact details given by the Contractor of Bid. The address and contact details for communication with the Employer/ Engineer shall be as per the details given in Contract Data.

Communications between parties that are referred to in the conditions shall be in writing. The Notice sent by facsimile (fax) or other electronic means shall be effective on confirmation of the transmission. The Notice sent by Registered post or Speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service.

6. Subcontracting

6.1 Unless specifically mentioned in the contract subletting will not be allowed. Subletting, where otherwise provided by the contract shall not be more than 25% of the contract price.

6.2 The Contractor shall not be required to obtain any consent from the Employer for:

- a. The sub-contracting of any part of the Works for which the Subcontractor is named in the Contract;
- b. The provision for labour, or labour component.

The purchase of Materials which are in accordance with the standards specified in the Contract.

6.3 Beyond what has been stated in clauses 6.1 and 6.2, if the Contractor proposes sub contracting any part of the work during execution of the Works, because of some unforeseen circumstances to enable him to complete the Works as per terms of the Contract, the Employer will consider the following before according approval:

- a. The Contractor shall not sub-contract the whole of the Works.
- b. The permitted subletting of work by the Contractor shall not establish any contractual relation-ship between the sub-contractor and the MCGM and shall not relieve the Contractor of any responsibility under the Contract.

6.4 The Engineer should satisfy himself before recommending to the Employer whether the circumstances warrant such sub-contracting; and The sub-Contractor so proposed for the Work possesses the experience, qualifications and equipment necessary for the job proposed to be entrusted to him.

7. Other Contractors

- 7.1 The Contractor shall cooperate and share the Site with other Contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the Contract Data. The Contractor shall also provide facilities and services for them as described in the Schedule. The

Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.

- 7.2 The Contractor should take up the works in convenient reaches as decided by the Engineer to ensure there is least hindrance to the smooth flow and safety of traffic including movement of vehicles and equipment of other Contractors till the completion of the Works.

8. Personnel

- 8.1 The Contractor shall employ for the construction work and routine maintenance the key personnel including technical personnel named in the Contract Data or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to those of the personnel stated in the Contract Data.
- 8.2 The Contractor's personnel shall appropriately be qualified, skilled and experienced in their respective trades or occupations. The Engineer shall have authority to remove, or cause to be removed, any person employed on the site or works, who carries out duties incompetently or negligently and persists in any conduct which is prejudicial to safety, health or the protection of the environment.
- 8.3 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.
- 8.4 The Contractor shall not employ any retired Gazetted officer who has worked in the Engineering Department of the MCGM /State Government and has either not completed two years after the date of retirement or has not obtained MCGM/State Government's permission to employment with the Contractor.

9. Employer's and Contractor's Risks

- 9.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

10. Employer's Risks

- 10.1 The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot, commotion or disorder

(unless restricted to the Contractor's employees) and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

11. Contractor's Risks

- 11.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks, referred to in clause 11.1, are the responsibility of the Contractor.

12. Insurance

12.1 The Contractor at his cost shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- a) Loss of or damage to the Works, Plant and Materials;
- b) Loss of or damage to Equipment;
- c) Loss of or damage to property (other than the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- d) Personal injury or death.

12.2 Insurance policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

12.3 Alterations to the terms of insurance shall not be made without the approval of the Engineer.

12.4 Both parties shall comply with any conditions of the insurance policies.

12.5 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid, from payments otherwise due to the Contractor or if no payment is due, the payment of premiums shall be debt due.

12.6 According to the General resolution No. GEN/1098/1357/Pra Kra-166/98/UDD-24/ on 3Nov, 2003 issued by the Urban development Department UDD, Govt. of Maharashtra, Mantralaya, Mumbai that the Corporation should execute insurance of the contract works from the Directorate of Insurance, Maharashtra state, Griha Nirman Bhavan (MHADA), 264, First Floor , Bandra (East), Mumbai, The contractor had to execute the insurance of the contract work from the above mentioned office and submit copy of the respective office. **If the contractor fails to execute the**

insurance from the above mentioned office, then the corporation should deduct 1 percent of the contract work and remit it to the Directorate of insurance through DD.

13. Site Investigation Reports

13.1 The Contractor, in preparing the Bid, may rely, at his own risk, on any Site Investigation Reports referred to in the Contract Data, supplemented by any other information available to him, before submitting the bid.

14. Queries about the Contract Data

14.1 The Engineer will clarify queries on the Contract Data.

15. Contractor to Construct the Works and Undertake Maintenance (if specified in the tender)

15.1 The Contractor shall construct, and install and maintain the Works in accordance with the Specifications and Drawings and as per instructions of the Engineer.

15.2 The Contractor shall construct the works with intermediate technology, i.e., by manual means with medium input of machinery required to ensure the quality of works as per specifications. The Contractor shall deploy the equipment and machinery as required in the contract.

15.3 The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and byelaws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in future by the State or Central Government or the local authority. Salient features of some of the major laws that are applicable are given below:

- a-** The Water (Prevention and Control of Pollution) Act, 1974, this provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.
- b-** The Air (Prevention and Control of Pollution) Act, 1981, this provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

- e. The Environment (Protection) Act, 1986, this provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.
- d. The Public Liability Insurance Act, 1991, This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

16. The Works and Routine Maintenance to be completed by the Intended Completion Date

16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works and Routine Maintenance, if specified in the tender, in accordance with the program submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

17. Approval by the Engineer

17.1 The Contractor shall **submit details Specifications and Drawings within 30 days (for all lifts) from date of issue of LOA** showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings. **Failing which Rs. 2000/- per day as a penalty will be implemented.**

17.2 The Contractor shall be responsible for design and safety of Temporary Works.

17.3 The Engineer's approval shall not alter the Contractor's responsibility for design and safety of the Temporary Works.

17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

18. Safety

18.1 The Contractor shall be responsible for the safety of all activities on the Site. He shall comply with all applicable safety requirements and take care of safety of all persons entitled to be on the site and the works. He shall use reasonable efforts to keep the site and the works, both during construction and maintenance, clear of unnecessary obstruction so as to avoid danger to the persons and the users.

- Workers employed on mixing asphalt materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Power warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- The workers engaged for cleaning the manholes/sewers should be properly trained before allowing working in the manhole.

18.2 Safety Programs:-

- I- Have adequate safety supervision in place to ensure that safety programs set up by the firms/agencies are in compliance with prevalent laws and regulations.
- II- Review safety programs developed by each of the trade firms, prepare and submit a comprehensive safety program.
- III- Monitor day to day implementation of safety procedures.

18.3 First Aid Facilities: -

- i. At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- ii. The first-aid box shall be distinctly marked with a red cross on white back ground.
- iii. Adequate arrangements shall be made for immediate reoccupant of the equipment when necessary.
- iv. Nothing except the prescribed contents shall be kept in the First-aid box.
- v. The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.

- vi. A person in charge of the First-aid box shall be a person trained in First-aid treatment, in the work places where the number of contract labour employed is 150 or more.

19. Discoveries

18.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

20. Possession of the Site

20.1 The Employer shall handover complete or part possession of the site to the Contractor 7 days in advance of construction programme. At the start of the work, the Employer shall handover the possession of at-least 75% of the site free of all encumbrances, the remaining 25 % of the possession as per contractor's construction programme.

21. Access to the Site

21.1 The Contractor shall allow access to the Site and to any place where work in connection with the Contract is being carried out, or is intended to be carried out to the Engineer and any person/persons/agency authorized by: a. The Engineer b. The Employer or authorized by the Employer.

22. Instructions

22.1 The Contractor shall carry out all instructions of the Engineer, which comply with the applicable laws where the Site is located.

22.2 The Contractor shall permit the appointed and/or authorized persons to inspect the Site and/or accounts and records of the Contractor and its subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed, if so required. The Contractor's attention is invited to Clause of 'Fraud and Corruption', which provides, inter alia, that acts intended to materially impede the exercise of the inspection and audit rights provided for under the Clause & constitute a obstructive practice subject to contract termination.

22.3 Engineer to have power to issue further drawings or instructions:

The Engineer shall have the power and authority from time to time and at all times to make and issue such further drawings and to give such further instructions and directions as may appear to him necessary or proper for the guidance of the contractor and the good and sufficient execution of the works according

to terms of the specifications and Contractor shall receive, execute, obey and be bound by the same, according to the true intent and meaning thereof, as fully and effectually as though the same had accompanied or had been mentioned or referred to in the specification, and the Engineer may also alter or vary the levels or position of nature of works contemplated by the specifications, or may order any of the works contemplated thereby to be omitted, with or without the substitution of any other works in lieu thereof, or may order any work or any portion of work executed or partially executed, to be removed, changed or altered, added if needful, may order that other works shall be substituted instead thereof and difference of expense occasioned by any such diminution or alteration so ordered and directed shall be added to or deducted from the amount of this Contract, as provided under condition no.10(a) hereinafter.

No work which radically changes the original nature of the Contract shall be ordered by the Engineer and in the event of any deviation being ordered which in the opinion of the Contractor changes the original nature of Contract he shall nevertheless carry it out and disagreement as to the nature of the work and the rate to be paid therefore shall be resolved in accordance with condition no.13d.

The time for completion of the Works, shall be in even of any deviations resulting in additional cost over the contract price being ordered, be extended or reduced reasonably by the Engineer. The Engineer's decision in this case shall be final.

B. Time Control

22. Programme

22.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme, including Environment Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works, along with monthly cash flow forecasts for the construction of works.

After the completion of the construction works, the programme for the Routine Maintenance Work, showing the general methods, arrangements, order and timing for all the activities involved in the Routine Maintenance will also be submitted by the Contractor to the Engineer for approval if specified in the tender. The programme for Routine Maintenance will be submitted in each year for the period of Maintenance.

22.2 The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/ equipments being placed in field laboratory and the

location of field laboratory along with the Programme. The Engineer shall cause these details to be verified at each appropriate stage of the programme.

22.3 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.

22.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

22.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme shall show the effect of Variations and Compensation Events.

23. Extension of Time In Contracts:

Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

a) Extension attributable to MCGM

- i. Extension Due To Modification:** If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise and in any case **should not be less than 30 days before the expiry of the date fixed for completion of the works.**
- ii. Extension For Delay Due To MCGM:** In the event of any failure or delay by the MCGM to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the MCGM due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore, but in any such case, the MCGM may grant such extension(s) of the completion date as may be considered reasonable.

Note: For extension of time period as governed in (i) and (ii) above, any modifications in design/drawings, specifications, quantities shall be needed to be justified with recorded reasons with approval of Ch.Eng. for not anticipating the same while preparing estimates and draft tender.

b) Extension Of Time For Delay Due To Contractor: The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed no later than the date(s) / the programme for completion of work as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in above as (a.i) and (a.ii), the MCGM may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time as the Engineer may decide.

On such extension the MCGM will be entitled without prejudice to any other right and remedy available on that behalf, to recover the compensation as governed by Clause 8(e) of GCC.

For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued.

Further, competent authority while granting extension to the currency of contract under Clause (b) of as above may also consider levy of penalty, as deemed fit based on the merit of the case. Also, the reasons for granting extension shall be properly documented.

24. Delays Ordered by the Engineer

24.1 The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works. Delay/delays totaling more than 30 days will require prior written approval of the DMC/AMC.

25. Management Meetings

25.1 The Engineer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the plans for progress of the Works.

25.2 The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.

C. Quality Control

26.1. Work to be open to Inspection and Contractor or Responsible agent to be present

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 Eng-in-charge and his subordinates and the contractor shall at all times during the usual working hours, at all other times, during the usual working hours and at all other times at which reasonable notice of the intention of the Eng-in-charge and his subordinates to visit the works shall have been given to the contractor, either himself be present to receive orders and instruction or have responsible agent duly accredited in writing present for that purpose. Order given to

the contractors' duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

26.2. Notice to Be Given Before Work Is Covered Up

The contractor shall give not less than ten days' notice in writing to the Eng-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 dimension thereof taken before the same is so covered up or placed beyond the reach of measurements and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Eng-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 or consent obtained the same shall be uncovered at the contractors 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

26.3 Works to be executed in accordance with specifications / drawings / orders etc.:

The contractor shall execute the whole and every part of the work the most substantial and workman like manner and both has regards material and every other respect in strict accordance with specifications.

The contractor shall also confirm 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 or work during office hours. The contractor shall 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.

The detail specifications and drawings shall be submitted within 30 days (for all lifts) from the date of receipt of LOA. Failing which Rs. 2000/- per day as a penalty will be implemented.

27. Identifying Defects

27.1 The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

27.2 The Contractor shall permit the Employer's technical person(s) to check the Contractor's work and notify the Engineer and Contractor if any defects that are found.

28. Tests

If the Engineer instructs the Contractor to carry out a test not specified in the Specification/ Quality Assurance Handbook to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no defect, the test shall be a compensation event.

When required by the Engineer-in-charge the contractor(s) shall supply for the purpose of testing samples of all materials proposed to be used in the works. Samples submitted either to govern bulk supplies or required for testing before use shall be in suitable packages to contain them and shall be provided free of charge by the contractor. The cost of testing shall be borne by the contractor even if the result of the sample confirm or do not confirm to the relevant BIS code specifications.

- i. All expenditure required to be incurred for taking the samples conveyance, packing shall be borne by the contractor himself.
- ii. The failed material shall be removed from the site by the contractor at his own cost within a week time of written order of the Engineer-in-charge.

29.The contractor shall install testing equipment at site. The contractor shall ensure and certify the calibration of the equipment so installed and shall maintain the same in working order throughout the period of construction. The contractor shall also provide necessary technically qualified experienced trained staff for carrying out such tests for using such equipment. The tests shall be carried out under the supervision of the Engineer-in-charge. The calibration shall be checked every twelve months as directed by Engineer-in-charge.

30. Correction of Defects noticed during the Defects Liability Period.

30.1 (a) The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and ends after three years. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

(b) Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice.

(c) The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.

31. Uncorrected Defects and Deficiencies

31.1 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period under clause and deficiencies in maintenance, to the satisfaction of the Engineer, within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect or deficiency corrected, and the Contractor shall pay this amount, on correction of the Defect or deficiency by another agency.

32. Variations

The Engineer shall, having regard to the scope of the Works and the sanctioned estimated cost, have power to order, in writing, Variations within the scope of the Works he considers necessary or advisable during the progress of the Works. Such Variations shall form part of the Contract and the Contractor shall carry them out and include them in updated Programmes produced by the Contractor. Oral orders of the Engineer for Variations, unless followed by written confirmation, shall not be taken into account.

33. Payments for Variations

33.1 If rates for Variation items are specified in the Bill of Quantities, the Contractor shall carry out such work at the same rate.

33.2 The rate for Extra/Excess shall be governed by clause 10.A of Standard General Condition of Contract

34. Cash Flow Forecasts

When the Programme is updated, the Contractor shall provide the Engineer with an updated cash flow forecast.

35. Payment Certificates

The payment to the Contractor will be as follows for construction work:

- a. A bill shall be submitted by the Contractor monthly or before the date fixed by the Engineer In-charge for all works executed in the previous month, and the Engineer In-charge shall take or cause to be taken requisite measurement for the purpose of having the same verified and the claim, so far as it is admissible, shall be adjusted, if possible, within 10 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 counter signature to the measurement 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.

- b. The Engineer shall check the Contractor's fortnightly/monthly statement within 14 days and certify the amount to be paid to the Contractor.
- c. The value of work executed shall be determined, based on measurements by the Engineer.
- d. The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- e. The value of work executed shall also include the valuation of Variations and Compensation Events.
- f. The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information. (g) The contractor shall submit all bills on the printed forms at the office of Engineer In-charge. The charges to be made in the bills shall always be entered at the rates specified in tender.

36. Payments

36.1 Payments shall be adjusted for deductions for advance payments, retention, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 15 days of the date of each certificate.

36.2 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 MCGM without reference to the actual loss or damage sustained and whether any damage has or has not been sustained.

36.3 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 the certificate of completion given. But in the case of works estimated to cost more than Rs. One Thousand, the contractor shall on submitting a monthly bill therefore be entitled to receive payment proportionate to the part of the work than 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 actual 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 re-erected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the offering of any claim not shall it conclude, determine or effect in any other way, the powers of the Engineer In-charge 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 Engineer In-charge's certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.

36.4 Payment for the work of Lift shall be made by following way-

Part I-SITC of Hospital lift.

- i.) **70% of contract value (i.e, SITC cost of Lift) on delivery of material on site per lift.**
- ii.) **20% of contract value on completion of installation work per lift.**
- iii.) **10% of contract value on handing over of lift.**

Note- 1) After supply of material on site, work must be started immediately without interlinking with the payment of supplied material.

2) The project may be selected for vigilance observation. Therefore 5% of payment amount is withheld from each running bill and it will settle after the notifications of the vigilance observation.

37. The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor for not having given early warning or not having cooperated with the Engineer.

38. Tax

“G.S.T. and other state levies / cess which are not subsumed under GST will be applicable. The tenderer shall quote inclusive of all taxes applicable at the time of bid submission . It is clearly understood that MCGM will not bear any additional liability towards payment if any Taxes & Duties.

Wherever the services to be provided by the Tenderers, falls under Reverse Charge Mechanism, the price quoted shall be exclusive of GST, but inclusive of Taxes / Duties / Cess other than GST, if any.

Rates accepted by MCGM shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates; increase in taxes / any other levies / tolls etc. except that payment / recovery for overall market situation shall be made as per Price Variation and if there is any subsequent change(after submission of bid) in rate of GST applicable on the work/ services to be executed as per tender. i.e. any increase will be reimbursed by BMC whereas any reduction in the rate of GST shall be passed on to BMC as per the provision of the GST Act.”

39. Currencies

All payments will be made in Indian Rupees.

40. Standard deductions as per prevailing guidelines of Government will be applicable to the bills.

Part II -CSMC of Lifts

i) Payment will be made quarterly, after submission proper reports.

41. Liquidated Damages

Both, the Contractor and the Employer have agreed that it is not feasible to precisely estimate the amount of losses due to delay in completion of works and the losses to the public and the economy, therefore,

both the parties have agreed that the Contractor shall pay liquidated damages to the Employer and not by way of penalty, at the rate per week or part thereof stated in the Contract Data for the period that the Completion Date is later than the Intended Completion Date. Liquidated damages at the same rates shall be withheld if the Contractor fails to achieve the milestones prescribed in the Contract Data. However, in case the Contractor achieves the next milestone, the amount of the liquidated damages already withheld shall be restored to the Contractor by adjustment in the next payment certificate. The Employer and the contractor have agreed that this is a reasonable agreed amount of liquidated damage. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's other liabilities.

41. Cost of Repairs

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at his cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

42. Completion of Construction and Maintenance

42.1 The Contractor shall request the Engineer to issue a certificate of completion of the construction of the works, and the Engineer will do so upon deciding that the works is completed. This shall be governed as per clause no. 8(g) of Standard General Conditions of Contract.

43. Taking Over

43.1 The Employer shall take over the works within seven days of the Engineer issuing a certificate of completion of works. The Contractor shall continue to remain responsible for its routine maintenance during the maintenance period if specified in the contract.

44. Final Account

Final joint measurement along with the representatives of the contractor should be taken recorded and signed by the Contractors. Contractors should submit the final bill within 1 month of physical completion of the work.

If the contractor fails to submit the final bill within 1 month, the MCGM staff will prepare the final bill based on the joint measurement within next 3 months.

Engineer's decision shall be final in respect of claims for defect and pending claims against contractors.

No further claims should be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bills in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by the Commissioner shall be made within a reasonable period as may be necessary for the purpose of verification etc.

After payment of the final bill as aforesaid has been made, the contractor may, if he so desires, reconsider his position in respect of a disputed portion of the final bills and if he fails to do so within 84 days, his disputed claim shall be dealt with as provided in the contract.

The contractor have to submit the bill for the work carried out within 15 days from the date of completion of the work to the respective executing department. If the contractor fails to submit their bills to concerned executing department, penalty or action as shown below will be taken for each delayed bill:-

After 15 days from the date of completion/running bill up to certain date, up to next 15 days i.e. up to 30 days	Equal to 5% of bill amount
Next 15 days up to 45 days from the date of completion/running bill up to specified date	Equal to 10% of bill amount
If not submitted wit in 45 days from the date of completion/ R.A. bill	Bill will not be admitted for payment.

45. Operating and Maintenance Manuals

45.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

45.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

46. Termination

46.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

46.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:

- a) the Contractor stops work for 30 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
- b) the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
- c) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- d) the Contractor does not maintain a Security, which is required;

- e) The Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in relevant clause.
- f) The Contractor fails to provide insurance cover as required under relevant clause .
- g) if the Contractor, in the judgment of the Employer, has engaged in the corrupt or fraudulent practices as defined in GCC in competing for or in executing the Contract.
- h) if the Contractor fails to set up a field laboratory with the prescribed equipment, within the period specified in the Contract Data; and any other fundamental breaches as specified in the Contract Data.
- i) if the Contractor fails to deploy machinery and equipment or personnel as specified in the Contract Data at the appropriate time.

46.3 When either party to the contract gives notice of a breach of contract to the Engineer for a cause other than those listed above, the Engineer shall decide whether the breach is fundamental or not.

46.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

46.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

46.6 The contract may be terminated by MCGM for convenience however MCGM will give a prior written 30 days notice.

47. Payment upon Termination

47.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for value of the work done and materials ordered less liquidated damages, if any, less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the Contract Data. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered from the security deposit, and performance security. If any amount is still left un-recovered it will be a debt due from the Contractor to the Employer

47.2 If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract, and less taxes due to be deducted at source as per applicable law.

48. Property

48.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer for use for completing balance construction work if the Contract is terminated because of the Contractor's default, till the Works is completed after which it will be transferred to the Contractor and credit, if any, given for its use.

49. Release from Performance

If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterward to which a commitment was made.

D. Other Conditions of Contract

50. Labour

50.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

50.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the number of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

51. Compliance with Labour Regulations

- a. During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority.
- b. Furthermore, the Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to

pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance guarantee. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

- c. The Contractor shall require his employees to obey all applicable laws, including those concerning safety at work.
- d. The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

52. Drawings and Photographs of the Works

52.1 The Contractor shall do photography/video photography of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work as required by Engineer In-charge and lastly after the completion of the work. **No separate payment will be made to the Contractor for this.**

52.2 The Contractor shall not disclose details of Drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the works or any part thereof or plant employed thereon, except those permitted under above clause, shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his sub-Contractors without the prior approval of the Engineer in writing. No photographs/ Video photography shall be published or otherwise circulated without the approval of the Engineer in writing.

53. The Apprentices Act, 1961

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 subject to all liabilities and penalties provided by the said Act and said Rules.

54 Contract Document

The documents forming the contract are to be taken as mutually explanatory of one another. Unless otherwise provided in the contract, the priority of the documents forming the contract shall be, as follows:

- 1) Contract Agreement (if completed)
- 2) The letter of Acceptance
- 3) The Bid:
- 4) Addendum to Bid; if any
- 5) Tender Document

- 6) The Bill of Quantities:
- 7) The Specification:
- 8) Detailed Engineering Drawings
- 9) Standard General Conditions of Contracts (GCC)
- 10) All correspondence documents between bidder/contractor and MCGM.

55. Conflict of Interest

The Applicant shall not have a conflict of interest (the “Conflict of Interest”) that affects the Bidding Process. Any Applicant found to have a Conflict of Interest shall be disqualified. An Applicant shall be deemed to have a Conflict of Interest affecting the Bidding Process, if

- 1. A constituent of such Applicant is also a constituent of another Applicant; or
- 2. Such Applicant has the same legal representative for purposes of this Application as any other Applicant; or
- 3. Such Applicant, or any Associate thereof has a relationship with another Applicant, or any Associate thereof, directly or through common third party/ parties, that puts either or both of them in a position to have access to each other’s information about, or to influence the Application of either or each other; or
- 4. The Applicant shall be liable for disqualification if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Applicant, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Applicant, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this TENDER. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.

56. Applications and costs thereof

No Applicant shall submit more than one Application for the Project. An applicant applying individually shall not be entitled to submit another application either individually. The Applicant shall be responsible for all of the costs associated with the preparation of their Applications and their participation in the Bid Process. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

57. Acknowledgment by Applicant

It shall be deemed that by submitting the Application, the Applicant has:

- a. made a complete and careful examination of the tender;
- b. received all relevant information requested from the Authority;
- c. accepted the risk of inadequacy, error or mistake in the information provided in the tender or furnished by or on behalf of the Authority relating to any of the matters referred; and
- d. Agreed to be bound by the undertakings provided by it under and in terms hereof.

“The Authority” shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the TENDER or the Bidding Process, including any error or mistake therein or in any information or data given by the Authority.

58. Right to accept or reject any or all Applications/ Bids

Notwithstanding anything contained in this TENDER, “The Authority” reserves the right to accept or reject any Application and to annul the Bidding Process and reject all Applications/ Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder.

“The Authority” reserves the right to reject any Application and/ or Bid if:

- (a) at any time, a material misrepresentation is made or uncovered, or
- (b) the Applicant does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Application.

In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof including the concession thereby granted by “The Authority”, that one or more of the pre-qualification conditions have not been met by the Applicant, or the Applicant has made material misrepresentation or has given any materially incorrect or false information, the Applicant shall be disqualified forthwith if not yet appointed as the Successful Bidder either by issue of the LOA (Letter of Approval) or entering into of the Agreement, and if the Applicant has already been issued the LOA or has entered into the Concession Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this TENDER, be liable to be terminated, by a communication in writing by “The Authority” to the Applicant, without the Authority being liable in any manner whatsoever to the Applicant and without prejudice to any other right or remedy which the Authority may have under this TENDER, the Bidding Documents, the Concession Agreement or under applicable law. “The Authority” reserves the right to verify all statements,

information and documents submitted by the Applicant in response to the TENDER. Any such verification or lack of such verification by the Authority shall not relieve the Applicant of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.

59 The bid shall be rejected if the bidder-

- a.Stipulates the validity period less than 180 days.
- b.Stipulates own condition/conditions.
- c.Does not fill and (digital) sign undertaking forms, which are incorporated, in the document.

60 Clarifications

Applicants requiring any clarification on the tender may notify “the Authority” in writing or by fax or e-mail. They should send in their queries before the date specified in the header data. “The Authority” shall Endeavor to respond to the queries within the period specified therein. The responses will be sent by fax and/or e-mail. The Authority will forward all the queries and its responses thereto, to all purchasers of the TENDER without identifying the source of queries.

“The Authority” shall Endeavor to respond to the questions raised or clarifications sought by the Applicants. However, the Authority reserves the right not to respond to any question or provide any clarification,

in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification, but not later than the date provided in header data.

“The Authority” may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Applicants. All clarifications and interpretations issued by the Authority shall be deemed to be part of the tender. Verbal clarifications and information given by Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

61 Amendment of tender

At any time prior to the deadline for submission of Application, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by an Applicant, modify the tender by the issuance of Addendum.

Any Addendum thus issued will be sent in writing/ Fax/ Email to all those who have purchased the tender.

In order to afford the Applicants a reasonable time for taking an Addendum into account, or for any other reason, the Authority may, in its sole discretion, extend the Application Due Date.

Preparation and Submission of Application

62. Language

The Application and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Applicant with the Application may be in any other language provided that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Applicant. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Application, the English language translation shall prevail.

63 Format and signing of Application

The Applicant shall provide all the information sought under this TENDER. The Authority will evaluate only those Applications that are received in the required formats and complete in all respects. Incomplete and /or conditional Applications shall be liable to rejection.

The Applicant will upload bid in One Folder in electronic form which shall contain the scanned certified copies of the documents given below and the documents uploaded has to be digitally signed by the bidder. These copies shall be certified by Practicing Notary approved by the Govt. of Maharashtra or Govt. of India with his stamp, clearly stating his name & registration number, except where original documents are demanded.

64. Marking of Applications

The Applicant shall submit the Application in the format specified at Appendix-I, together with the documents, upload in folder as “VENDOR” together with their respective enclosures

Applications submitted by fax, telex, telegram shall not be entertained and shall be rejected outright.

65 Late Applications

Applications received by the Authority after the specified time on the Application Due Date shall not be eligible for consideration and shall be summarily rejected.

66. Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the short-listed qualified Applicants shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising the Authority in relation to or matters arising out of, or concerning the Bidding Process. The Authority will treat all information, submitted as part of Application, in confidence and will require all those who have access to such material to treat the same in

confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority or as may be required by law or in connection with any legal process.

67. Clarification of Financial Bids

To assist in the examination, evaluation and comparison of Bids, the Engineer may, at his discretion, ask any bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be in writing or by post/facsimile/e-mail. No Bidder shall contact the Engineer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. Any effort by the Bidder to influence the Engineer in the Engineer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

68 Inspection of site and sufficiency of tender:

1. The Contractor shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the quantities and nature of the work and materials necessary for the completion of the works and means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect his tender. He shall also take into consideration the hydrological and climatic conditions.
2. The Employer may make available to the Contractor data on hydrological and sub-surface conditions as obtained by or on his behalf from investigations relevant to the works but the Contractor shall be responsible for his own interpretation thereof. The contractor shall engage his investigating agency with prior approval of the Engineer from the approved list of such agencies by MCGM or Govt. at his cost initially before commencing actual work and which shall be reimbursed immediately subject to satisfaction of the Engineer for faithful compliance and submission of required data regarding such investigation within specified time.
3. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of works / items / quantities, or in Bill of Quantities, which rates and prices shall, except as otherwise provided cover all

his obligations under the Contract and all matters and things necessary for proper completion and maintenance of the works. No extra charges consequent on any misunderstanding.

4. Not Foreseeable Physical Obstructions or Conditions: If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Contractor, determine:

- any extension of time to which the Contractor is entitled and
- The amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price.
- and shall notify the Contractor accordingly. Such determination shall take account of any instruction which
- the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer. However such costings shall be got approved by the competent authority as governed vide rules prevailing with authority.

69. Official Secrecy:

The Contractor shall of all the persons employed in any works in connection with the contract that the India Official Secrets Act 1923 (XIX of 1923) applies to them and will continue to apply even after execution of the said works and they will not disclose any information regarding this contract to any third party. The contractor shall also bring into notice that, any information found to be leaked out or disclosed the concern person as well as the Contractor will be liable for penal action; further the Corporation will be at liberty to terminate the contract without notice.

70. Subsequent Legislation:

If on the day of submission of bids for the contract, there occur changes to any National or State statute, Ordinance, decree or other law or any regulation or By-laws or any local or other duly constituted authority or the introduction of any such National or State Statute, Ordinance, decree or by which causes additional or reduced cost to the Contractor, such additional or reduced cost shall, after due consultation

with the Contractor, be determined by the concerned Engineering Department of MCGM and shall be added to or deducted from the Contract Price with prior approval of competent authority and the concerned Engineering Department shall notify the Contractor accordingly with a copy to the Employer. MCGM reserve the right to take decision in respect of addition/reduction of cost in contract.

71. Patent, Right and Royalties:

The contractor shall save harmless and indemnify the Corporation from and against all claims and proceedings for or on account of infringement of any Patent rights, design trademark or name of other protected rights in respect of any constructional plant, machine work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the works or any of them.

72. Payments, Tax and Claims:

- **The limit for unforeseen claims**

Under no circumstances whatever the contractor shall be entitled to any compensation from MCGM on any account unless the contractor shall have submitted a claim in writing to the Eng-in-charge within 1 month of the case of such claim occurring.

- **No interest for delayed payments due to disputes, etc:**

It is agreed that the Municipal Corporation of Greater Mumbai or its Engineer or Officer shall not be liable to pay any interest or damage with respect of any moneys or balance which may be in its or its Engineer's or officer's hands owing to any dispute or difference or claim or misunderstanding between the Municipal Corporation of Greater Bombay or its Engineer or Officer on the one hand and the contractor on the other, or with respect to any delay on the part of the Municipal Corporation of Greater Bombay or its Engineer or Officers in making periodical or final payments or in any other respect whatever.

73. Settlement of Disputes:

- **Termination of contract for death**

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the legal representative of the individual Contractor or the proprietor of the proprietary concern and in case of partnership, the surviving partners, are capable of carrying out and completing the contract, the Commissioner shall be entitled to cancel the contract as to its uncompleted part without the Corporation being in any way liable to payment of any compensation to the estate of the deceased Contractor and or to the surviving partners of the Contractor's firm on account of the cancellation of the contract. The decision of the Commissioner that the legal representative of the deceased Contractor or surviving partners of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the Commissioner shall not hold estate of the deceased Contractor and or surviving partners of the Contractor's firm liable in damages for not completing the contract.

- **Settlement of Disputes:**

If any dispute or differences of any kind whatsoever other than those in respect of which, the decision of any person is, by the Contract, expressed to be final and binding) shall arise between the Employer and the Contractor or the Engineer and the Contractor in connection with or arising out of the Contract or carrying out of the Works (Whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract) it, the aggrieved party may refer such dispute within a period of 7 days to the concerned Addl. Municipal Commissioner who shall constitute a committee comprising of three officers i.e. concerned Deputy Municipal Commissioner or Director (ES&P), Chief Engineer other than the Engineer of the Contract and concerned Chief Accountant. The Committee shall give decision in writing within 60 days. Appeal on the Order of the Committee may be referred to the Municipal Commissioner within 7 days. Thereafter the Municipal Commissioner shall constitute a Committee comprising of three Addl. Municipal Commissioners including Addl. Municipal Commissioner in charge of Finance Department. The Municipal Commissioner within a period of 90 days after being requested to do so shall give written notice of committee's decision to the Contractor. Save as herein provided such decision in respect of every matter so referred shall be final and binding upon both parties until the completion of the works, and shall forthwith be given effect to by the Contractor who shall proceed with the works with due diligence, whether he requires arbitration as hereinafter provided or not. If the Commissioner has given written notice of the decision to the Contractor and no Claim to arbitration has been communicated within a period of 90 days from receipt of such notice the said decision shall remain final and binding upon the Contractor.

74. Arbitration and Jurisdiction:

If the Commissioner shall fail to give notice of the decision as aforesaid within a period of 90 days after being requested as aforesaid, or if the Contractor be dissatisfied with any such decision, then and in any such case the Contractor may within 90 days after receiving notice of such decision or within 90 days after the expirations of the first named period of 90 days (as the case may be) require that the matter or matters in dispute be referred to arbitration as herein after provided.

All disputes or differences in respect of which the decision (if any) of the Commissioner has not become final and binding as aforesaid shall be finally settled by Arbitration as follows:

Arbitration shall be effected by a single arbitrator agreed upon the parties. The arbitration shall be conducted in accordance with the provisions of the Arbitration Act, 1996 or any statutory modifications thereof, and shall be held at such place and time within the limits of Brihan Mumbai as the arbitrator may determine. The decision of the arbitrator shall be final and binding upon the parties hereto and the expense of the arbitration shall be paid as may be determined by the arbitrator. Performance under the Contract shall, if reasonably be possible, continued during the arbitration proceedings and payment due to the Contractor by the Employer shall not be withheld unless they are the subject matter of arbitration proceedings. The said arbitrator shall have full power to open up, review and revise any decision, opinion, direction, certification or valuation of the Commissioner and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the Commissioner for the purpose of obtaining his said decision. No decision given by the Commissioner in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator on any matters whatsoever relevant to the disputes or difference referred to the arbitrator as aforesaid. All awards shall be in writing and for claims equivalent to 5,00,000 or more such awards shall state reasons for amounts awarded. The expenditure of arbitration shall be paid as may be determined by arbitrator.

In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

75 Copyright:

The copyright of all drawings and other documents provided by the Contractor under the contract shall remain vested in the Contractor or his sub-contractors as the case may be the employer shall have a license to use such drawings and other documents in connection with the design, construction, operation, maintenance of the works. At any time the Employer shall have further license without additional payment to the Contractor to use any such drawings or documents for the purpose of making any improvement of the works or enlargement or duplication of any part thereof, provided that such improvement, enlargement, or duplication by itself or in conjunction with any other improvements,

Enlargements or duplications already made in accordance with the further license does not result in the duplication of the whole works.

76. Receipts to be signed in firm's name by any one of the partners:

Every receipt for money which may become payable or for any security which may become transferable to the Contractor under these present shall, if signed in the partnership name by any one of the partners, be a good and sufficient discharge to the Commissioner and Municipal Corporation in respect of the money or security purporting to be acknowledged thereby, and in the event of death of any of the partners during the pendency of this contract, it is hereby expressly agreed that every receipt by any one of the surviving partners shall, if so signed as aforesaid, be good and sufficient discharge as aforesaid provided that nothing in this clause contained shall be deemed to prejudice or effect any claim which the Commissioner or the Corporation may hereafter have against the legal representatives of any partners so dying or in respect of any breach of any of the conditions thereof, provided also that nothing in this clause contained shall be deemed prejudicial or affect the respective rights or obligations of the Contractors and of the legal representatives of any deceased Contractors interest.

77. Proprietary data

All documents and other information supplied by the Authority or submitted by an Applicant to the Authority shall remain or become the property of the Authority. Applicants are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Application. The Authority will not return any Application or any information provided along therewith.

78. Correspondence with the Applicant

Save and except as provided in this TENDER, the Authority shall not entertain any correspondence with any Applicant in relation to the acceptance or rejection of any Application.

79. Payment:

Interim Payment:

- i. Interim bills shall be submitted by the Contractor from time to time (but at an interval of not less than one month) for the works executed. The Engineer shall arrange to have the bills verified by taking or causing to be taken, where necessary, the requisite measurement of work.

- ii. Payment on account for amount admissible shall be made on the Engineer certifying the sum to which the Contractor is considered entitled by way of interim payment for all the work executed, after deducting there from the amount already paid, the security deposit / retention money and such other amounts as may be deductible or recoverable in terms of the contract.
- iii. On request, the contractor will be paid upto 75 percent of the value of the work carried out as an adhoc payment in the first week of next month after deducting there from recoveries on account of advances, interest, retention money, income tax etc. The balance payment due will be paid thereafter.
- iv. No interim payment will be admitted until such time the Contractor have fully complied with the requirement of the Condition no.8 (g) and 8 (h) concerning submission and approval of Network Schedule for the works, as detailed in Condition 8 (h). A fixed sum shall be held in abeyance at the time of next interim payment for non-attainment of each milestone in the network and shall be released only on attainment of the said milestone.
- v. An interim certificate given relating to work done or material delivered may be modified or corrected by a subsequent interim certificate or by the final certificate. No certificate of the Engineer supporting an interim payment shall of itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the contract.

80. Banning/De-Registration of Agencies of Construction works / SITC of M&E Works in MCGM

- The regulations regarding Demotion/ Suspension Banning for specific period or permanently / De-Registration shall be governed as per the respective condition in Contractor Registration Rules of MCGM.

81. JOINT VENTURE

In case if Joint Venture is allowed for the Project, the guidelines for JV as follows shall be incorporated in the Tender Document:

- a. Joint Venture should be allowed only when the number of identifiable different works is more than one and/or the estimated cost of tender is more than Rs.100 Crores. JV shall also be allowed for complex technical work below Rs.100 Crores with the approval of concerned AMC
- b. Separate identity/name shall be given to the Joint Venture firm.
- c. Number of members in a JV firm shall not be more than three in normal circumstances, if the work involves only one discipline (say Civil or Electrical). If number of members in JV is required to be more than three, then approval of concerned AMC needs to be sought.
- d. A member of JV firm shall not be permitted to participate either in individual capacity or as a member of another JV firm in the same tender.
- e. The tender form shall be purchased and submitted in the name of the JV firm or any constituent member of the JV.
- f. Normally EMD shall be submitted only in the name of the JV and not in the name of constituent member. However, EMD in the name of lead partner can be accepted subject to submission of specific request letter from lead partner stating the reasons for not submitting the EMD in the name of JV and

giving written confirmation from the JV partners to the effect that the EMD submitted by the lead partner may be deemed as EMD submitted by JV firm.

g. One of the members of the JV firm shall be the lead member of the JV firm who shall have a majority (at least 51%) share of interest in the JV firm. The other members shall have a share of not less than 20% each in case of JV firms with up to three members and not less than 10% each in case of JV firms with more than three members. In case of JV firm with foreign member(s), the lead member has to be an Indian firm with a minimum share of 51%.

h. A copy of Letter of Intent or Memorandum of Understanding (MoU) executed by the JV members shall be submitted by the JV firm along with the tender. The complete details of the members of the JV firm, their share and responsibility in the JV firm etc. particularly with reference to financial technical and other obligation shall be furnished in the agreement.

i. Once the tender is submitted, the agreement shall not be modified/altered/terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited. In case of successful tenderer, the validity of this agreement shall be extended till the currency of the contract expires.

j. Approval for change of constitution of JV firm shall be at the sole discretion of the MCGM. The constitution of the JV firm shall not be allowed to be modified after submission of the tender bid by the JV firm except when modification becomes inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. In any case the Lead Member should continue to be the Lead Member of the JV firm. Failure to observe this requirement would render the offer invalid.

k. Similarly, after the contract is awarded, the constitution of JV firm shall not be allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get viti-ated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract condition.

l. On award of contract to a JV firm, a single Performance Guarantee shall be required to be submitted by the JV firm as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization advance, machinery Advance etc. shall be accepted only in the name of the JV firm and no splitting of guarantees amongst the members of the JV firm shall be permitted.

m. On issue of LOA, an agreement among the members of the JV firm (to whom the work has been awarded) has to be executed and got registered before the Registrar of the Companies under Companies Act or before the Registrar / Sub-Registrar under the Registration Act, 1908. This agreement shall be submitted by the JV firm to the MCGM before signing the contract agreement for the work. (This agreement format should invariably be part of the tender condition). In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited and other penal actions due shall be taken against partners of the JV and the JV. This joint venture agreement shall have, inter-alia, following clauses:-

- i. **Joint and several liability** - The members of the JV firm to which the contract is award-ed, shall be jointly and severally liable to the Employer (MCGM) for execution of the pro-ject in accordance with General and Special conditions of the contract. The JV members shall also be liable jointly and severally for the loss, damages caused to the MCGM during the course of execution of the contract or due to no execution of the contract or part there-of.
- ii. **Duration of the Joint Venture Agreement** -It shall be valid during the entire period of the contract including the period of extension if any and the maintenance period after the work is completed.
- iii. **Governing Laws** - The Joint Venture Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws.
- iv. **Authorized Member** -Joint Venture members shall authorize one of the members on be-half of the Joint Venture firm to deal with the tender, sign the agreement or enter into con-tract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said ten-der/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV firm.

No member of the Joint Venture firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the employer in respect of the said tender/contract.

a. Documents to be enclosed by the JV firm along with the tender:

- i. In case one or more of the members of the JV firm is/are partnership firm(s), following documents shall be submitted:
 - a) Notary certified copy of the Partnership Deed,
 - b) Consent of all the partners to enter into the Joint Venture Agreement on a stamp paper of appropriate value (in original).
 - c) Power of Attorney (duly registered as per prevailing law) in favor of one of the partners to sign the MOU and JV Agreement on behalf of the partners and cre-ate liability against the firm.
- ii. In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:
 - a) Affidavit on Stamp Paper of appropriate value declaring that his Concern is a Proprietary Concern and he is sole proprietor of the Concern OR he is in posi-tion of "KARTA" of Hindu Undivided Family and he has the authority, power and consent given by other partners to act on behalf of HUF.
- iii. In case one or more members is/are limited companies, the following documents shall be submitted:
 - a) Notary certified copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement, authorizing MD or one of the Directors or Managers of the Company to sign MOU,

JV Agreement, such other documents required to be signed on behalf of the Company and enter into liability against the company and/or do any other act on behalf of the company.

- b) Copy of Memorandum and articles of Association of the Company.
- c) Power of Attorney (duly registered as per prevailing law) by the Company authorizing the person to do/act mentioned in the para (a) above.

o. All the members of the JV shall certify that they have not been black listed or debarred by MCGM from participation in tenders/contract in the past either in their individual capacity or the JV firm or partnership firm in which they were members / partners.

p. Credentials & Qualifying criteria: Technical and financial eligibility of the JV firm shall be adjudged based on satisfactory fulfillment of the following criteria:

Technical eligibility criteria: In case of Work involving single discipline, the Lead member of the JV firm shall meet at least 35% requirement of technical capacity as stipulated in tender document.

OR

In case of composite works (e.g. works involving more than one distinct component such as Civil Engineering works, M&E works, Electrical works, etc. and in the case of major bridges, substructure and superstructure etc.), at least one member should have satisfactorily completed 35% of the value of any one component of the project work so as to cover all the components of project work or any member having satisfactorily completed 35% of the value of work of each component during last seven financial years.

In such cases, what constitutes a component in a composite work shall be clearly defined as part of the tender condition without any ambiguity.

Financial eligibility criteria: The contractual payments received by the JV firm or the arithmetic sum of contractual payments received by all the members of JV firm in any one of the previous three financial years and shall be at least **100% of the estimated value** of the work as mentioned in the tender.

81. Compensation for delay:

If the Contractor fails to complete the works and clear the site on or before the Contract or extended date(s) / period(s) of completion, he shall, without prejudice to any other right or remedy of Municipal Corporation on account of such breach, pay as agreed compensation, amount calculated as stipulated below (or such smaller amount as may be fixed by the Engineer) on the contract value of the whole work or on the contract value of the time or group of items of work for which separate period of completion are

given in the contract and of which completion is delayed for every week that the whole of the work of item or group of items of work concerned remains uncompleted, even though the contract as a whole be completed by the contract or the extended date of completion. For this purpose the term 'Contract Value' shall be the value of the work at Contract Rates as ordered including the value of all deviations ordered:

- Completion period for projects (originally stipulated or as extended) not exceeding 6 months: **to the extent of maximum 1 percent per week.**
- Completion period for projects (originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: **to the extent of maximum ½ percent per week.**
- Completion period for projects (originally stipulated or as extended) exceeding 2 years: **to the extent of maximum ¼ percent per week.**

When the delay is not a full week or in multiple of a week but involves a fraction of a week the compensation payable for that fraction shall be proportional to the number of days involved. Provided always that the total amount of compensation for delay to be paid this condition shall not exceed the under noted percentage of the Contract Value of the item or group of items of work for which a separate period of completion is given.

- i. Completion period (as originally stipulated or as extended) not exceeding 6 Months: **10 percent.**
- ii. Completion period (as originally stipulated or as extended) exceeding 6 Months and not exceeding 2 years: **7 ½ percent.**
- iii. Completion period (as originally stipulated or as extended) exceeding 2 years: **5 percent.**

The amount of compensation may be adjusted set off against any sum payable to the contractor under this or any other contract with the Municipal Corporation.

82. Action and Compensation Payable In Case Of Bad Work and Not Done As Per Specifications

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Vigilance Department of the MCGM or any organization engaged by the MCGM for Quality Assurance and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the

Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work or to the officer of Vigilance Department, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description, 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 otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles

complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 8.e. of the general condition of contract in section 9 of tender document (for Compensation for delay) for this default. In such case the Engineer-in Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Engineer in charge may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

If the penalization amount exceeds maximum limit with respect to Clause 8.e of Standard General Conditions of Contract, then a show cause notice shall necessarily be issued to the contract as to why the contract should not be terminated.

The above clause is summarized to make it easy to understand as follows:

1. The Engineer-in-charge shall issue notice to the contractor for rectifying the defects or redoing of the work if necessary, within specific time to achieve the desired quality and quantity of the work and this should be governed by clause 8.f and 9.b of Stand-ard General Conditions of Contract.
2. If the contractor fails to comply the same, only then, the contractor shall be liable to pay compensation at the same rate as under clause 8.e of the Standard General Con-dition of Contract (for Compensation for delay) for this default.
3. If the penalization amount exceeds the maximum limit, then the contractor will be lia-ble for being banned/ deregistered from business dealings with MCGM and this shall be governed by relative provision in Registration Rules of MCGM and Standard Gen-eral Conditions of Contract.

4. This penalization shall be levied only on account of delay in work, unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of quality inferior to that contracted for or otherwise not in accordance with the contract.

83. Contractors remain liable to pay compensation: In any case in which any of the powers conferred upon the Engineer In-charge by the **relevant clauses** in documents that form a part of contract as exercised or is exercisable in the event of any future case of default by the Contractor, he is declared liable to pay compensation amounting to the whole of his security deposit. The liability of the Contractor for past and future compensation shall remain unaffected.

In the event of the Executive Engineer taking action against these **relevant clauses**, he may, if he so desires, take possession of all or any tools and plant, materials and stores in or upon the work of 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 Executive Engineer, may after giving notice in writing to the Contractor or his staff of the work 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 Executive Engineer may remove them at the contractors expense of sell them by auction or private sell on account of the Contractor at his risk in all respects and certificate of the Executive Engineer as to the expense of any such removal and the amount of the proceeds an expense of any such sell be final and conclusive against the Contractor.

84. No Claim To Any Payment Or Compensation Or Alteration In Or Restriction Of Work

- a) If at any time after the execution of contract documents, the Engineer shall for any reason whatsoever, desires that the whole or any part of the works 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 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 to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

- b) Where the total suspension of Work Order 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 10 days prior notice in writing to the Engineer within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineering 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 measurement 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 manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.

- c) Where the Engineer required to Contractor to suspend the work for a period in 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 the resumption of the work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remained ideal on the site of on the account of his having an to pay the salary of wages and 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 of any such suspension whatsoever occasion by 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.

85. Contractor to supply plant, ladder, scaffolding, etc and is liable for damages arising from non provision of lights, fencing, etc.

The Contractor shall supply at his own cost all material, 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 specification of 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 Eng-In-Charge as to any matter as to which under these conditions is entitled to be satisfied, or which is entitled to require together with the carriage therefore to and from the work.

The Contractor shall also supply without charge, the requisite number of person with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurements of examination at any time and from time to time of the work or materials, 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 offers 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 defence of every suit, action or other legal proceedings,

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 the consent of the contractor be paid for compromising any claim by any such person.

86. Prevention of Fire:

The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from the Engineer In-charge. When such permit is given, and also in all cases when destroying cut or dug up trees brushwood, grass, etc., by fire, the contractor shall take 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.

87. Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of MCGM property including any damage caused by spreading the fire shall be estimated by the Engineer In-charge or such other officer as he may appoint and the estimate of the Engineer in-charge to the decision of the Dy. Chief 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 or deducted by the Engineer In-charge from any sums that may be due or become due from MCGM to contractor under this Contract or otherwise. Contractor shall bear the expenses of defending any action or other legal proceedings that may be brought to prevent the spread of fire and he shall pay any damages and costs that may be awarded by the Court in consequence.

88. In the case of Tender by partners, any change in the constitution of the firm shall be forthwith, notified by the contractor through the Engineer In-charge for his information.

89. Action where no specifications:

In the case of any class of work for which there is no such specifications, such works shall be carried out in accordance with the specifications and in the event of there being no such specifications, then in such case, the work shall be carried out in all respects in accordance with all instructions and requirements of the Engineer In-charge.

90. Safety and medical help:

- i. The Contractor shall be responsible for and shall pay the expenses of providing medical help to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by MCGM, the same shall be recoverable from the contractor forthwith and be included without prejudice to any other remedy of MCGM from any amount due or that may become due to the Contractor.
- ii. The contractor shall provide necessary personal safety equipment and first-aid box for the use of persons employed on the site and shall maintain the same in condition suitable for immediate use at any time.

- iii. The workers shall be required to use the safety equipments so provided by the contractor and the contractor shall take adequate steps to ensure the proper use of equipments by those concerned.
- iv. When the work is carried on in proximity to any place where there is risk or drawing all necessary equipments shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.

91. 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 of works, on account of ant delay in according to sanction of estimates.

92. Anti-malaria and other health measures:

Anti-Malaria and other health measures shall be taken as directed by the Executive Health Officer of MCGM. Contractor shall see that mosquitogenic conditions are created so as to keep vector population to minimum level. Contractor shall carry out anti-malaria measures in the area as per the guidelines issued by the Executive Health Officer of MCGM from time to time.

In case of default, in carrying out prescribed anti-malaria measures resulting in increase in malaria incidence, contractor shall be liable to pay MCGM on anti-malaria measures to control the situation in addition to fine.

SECTION 10
SPECIFICATIONS
& SELECTION OF MATERIAL

SPECIFICATIONS & SELECTION OF MATERIAL

The tender is prepared on the basis of Unified Schedule of Rates and specifications 2018 and Fair item. The specifications of the items of USOR are available on MCGM portal <http://portal.mcgm.gov.in> under the Tender tab. Hence the deserving contractor shall either download the same from MCGM portal or the same may be collected in the soft copy format at the time of purchasing the tender from this office.

SELECTION OF MATERIAL

1. All materials brought on the site of work and meant to be used in the same, shall be the best of their respective kinds and to the approval of the Engineer. The Engineer or his representative will accept that the materials are really the best of their kinds, when it is proved beyond doubt that no better materials of the particular kind in question are available in the market.
2. The contractor shall obtain the approval of the Engineer of samples of all materials to be used in the works and shall deposit these samples with him before placing an order for the materials with the suppliers. The materials brought on the works shall conform in every respect to their approved samples. Fresh samples shall be deposited with the Engineer whenever the type or source of any material changes.
3. The contractor shall check each fresh consignment of materials as it is brought to the site of works to see that they conform in all respects to the Specifications of the samples approved by the Engineer, or both.
4. The Engineer will have the option to have any of the materials tested to find out whether they are in accordance with the Specifications and the Contractor will bear all expenses for such testing. All bills, vouchers and test certificates, which in the opinion of the Engineer or his representative are necessary to convince him as to the quality of the materials or their suitability shall be produced for his inspection when required.
5. Any materials that have not been found to conform to the specifications will be rejected forthwith and shall be removed from the site by the contractor at his own cost within 24 hours.
6. The Engineer shall have power to cause the Contractors to purchase and use such materials from any particular source, as may in his opinion be necessary for the proper execution of the work.

Name of Work: Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.

Scope of work and Technical Specifications

GS-1 scope of work for Lift:

The scope of work includes “Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.”

Approved Lift manufacturer-

- 1) M/s. Jhonson lifts Pvt. Ltd
- 2) M/s Otis Elevator Company (India) Limited
- 3) M/s. Kone Elevator India (P) Ltd
- 4) M/s/ Escon Elevator Pvt. Ltd.
- 5) M/s. Eros Elevators & Escalators Pvt. Ltd.
- 6) M/s. Schindler India Pvt. Ltd.
- 7) M/s. Thyssen Krupp Elevators India Pvt. Ltd.
- 8) M/s. Eskay Elevator (I) Pvt. Ltd.
- 9) M/s. Trio Elevators Co. (India) Ltd.
- 10) M/s. Omega Elevators

Or

Firms authorized by the above lift manufacturers after submitting Manufacturer’s authorization certificate in prescribed format as per Pg.No.171.

Above job include entire procedure of obtaining all necessary erection permission and “license to work the Lift” from Electrical Inspector (Lifts) with submission to the Engineer In-charge.

The Lifts work comprises of **“Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.”** along with lighting of lift shaft, earthing of lift equipment, cabling, architraves, painting & all the associated civil works necessary to complete the work in all respect.

The work of “Removal, Supply, Testing, Installation and Commissioning of 1 no. of lift shall be carried out as per instructions of site engineer.

Warrantee– Job covers three years (3 yrs.) onsite warrantee (Defect liability period) for all the lift parts

2 years CSMC contract after completion of 3 years Defect Liability Period.

The lift shall be complete with specified machine, 3VF drive, specified speed, Auto rescue device, overload warning indicator, suitable door safety as specified, display in car and at all floors etc. and allied civil, electrical works, scaffolding & barriers across at open entrances, shall be as per specifications in the tender document.

In the Period of 2 years CSMC contract, Contractor shall carried out the Preventive Maintenance of each lift monthly in consultation with MCGM Engineer.

Prior intimation of 3 days shall be given to the user department before carrying out the preventive maintenance work. Records for Preventive Maintenance and Breakdown maintenance shall be prepare and submitted to the user department time to time. No price escalation will be permissible in any case. The tenderer shall offer the rates considering all the above.

1.2 License:-

It is mandatory to obtain the licenses to install, operate and maintain the lifts from Lift Inspector (P.W.D.) Government of Maharashtra, by paying necessary government charges. Necessary documents, letters, drawings as required by PWD authorities will be provided by MCGM. The successful bidder shall collect the required documents from the user department. PWD fee for seeking erection permission and for license shall be borne by successful bidder. The rates quoted shall be inclusive of this.

GS-1 Submission of relevant details to lift Inspector:

The successful tenderer shall submit the necessary details in prescribed format to the Electrical Inspector (Lifts Mumbai), I.E. & I Dept., P.W.D. The work should be undertaken only after receipt of erection permission from competent authority.

GS-2 EVALUATION CRITERION

The lowest evaluated rates with Three years (3 yrs.) onsite warrantee (Defect liability period) and the lowest evaluated rates for all the lift parts with CSMC as per the maintenance schedule will be considered at the time of evaluation.

GS-3 GENERAL INSTRUCTIONS

3.1 The contractor shall have valid

- i) Electrical contractor's license issued by P.W.D., Maharashtra Government valid on the date of tendering.
- ii) License from Lift Inspector, P.W.D./ Ch.E.(Electrical) to install, operate and maintain the lifts.

3.2.1 Lift Inspector's Certification / License to Operate:- On completion of work, the contractor shall offer the lifts for testing and inspection by Lift Inspector, P.W.D., Government of Maharashtra and secure license for all the lifts and attend all formalities. Necessary documents, letters, drawings as required by PWD authorities will be provided by MCGM. PWD fee for seeking erection permission and for license shall be borne by successful bidder.

3.2.2 The contractor shall carry out the work as per Technical Specifications and Schedule. However, anything specifically not covered under the same but required to complete the work shall be in the Scope of Work for which no extra payment shall be admissible to the contractor.

The prices shall be firm. No price variation will be admitted during the contract period.

GS-4 COMPLETION PERIOD:

The work completion period including Removal, Supply, Installation, Testing and Commissioning of Passenger cum stretcher Lift- 1 no. shall be as follows:

Total Contract period	5 Months (120 days) from the date of receipt of PWD work permission and handing over of lift shaft.
Free Maintenance period	Three years (3 yrs) after completion of the SITC work.
Defect Liability period	3 Years.
CSMC period	2 years after completion of 3 yrs. Defect Liability period.

GS-5 Warranty period

The lifts supplied and installed shall be under three years (3 yrs.) onsite warrantee (Defect liability period) for all the lift parts with CSMC as per the maintenance schedule from the date of commissioning.

During the Defect liability period, the contractor shall replace all the defective parts, spares and consumables so as to keep the lifts in good working condition. The license to operate be got renewed from time to time in the contract period.

GS-6 ACQUAINTANCE WITH SITE AND WORK CONDITIONS ETC. :-

The contractor shall visit the site and verify the shaft, machine room, lift pit, service room conditions by the actual inspection of site etc, before submitting the tender. In case of doubts about any item or data included in the tender or otherwise, it shall be got clarified in pre-bid meeting if any. Once the tender is accepted, it shall be concluded that the contractor has verified and made himself conversant with all the details required for completing the work as per specifications, terms and conditions.

PART - 2
TECHNICAL SPECIFICATIONS
(FOR LIFT AND ELECTRICAL WORK)

The Lift shall comply 'The Bombay Lifts Rules 1958' with regards to fire norms. The Lift Machinery shall be placed directly above the lift shaft in machine room on raised platform beam with Rolled Steel joists, supplied and installed by the contractors.

1.1 DESIGN

The design of the equipment shall match the design & performance requirements as specified below.

1.1.1 PROVED DESIGN

The lift contractor shall develop the design based on the below specifications and on proven and reliable engineering practices. All sub systems & equipment shall be of proven design.

1.1.2 Design Criteria

The design of the equipment offered should meet the following criteria: -

- Usage of the latest state of the art technology.
- Design enhancements should not reduce the life cycle of equipment / components
- Design life of at least 20 years
- Highest levels of reliability& equipment availability
- Lowest maintenance cost
- Modular design
- Minimum life cycle cost
- High traceability of components through unique bar coding / serial nos / tagging
- Lowest energy consumption
- Highest levels of safety
- Environment friendly
- Code compliance

1.1.3 DESIGN REQUIREMENT – LIFE CYCLE

The design of each component will achieve the minimum service life specified below: -

- Ropes / Belts: - 8 years
- Over speed governor: - 20 years
- Traction machine / motor: - 20 years
- Door operator: - 20 years
- Safety gear / block: - 20 years
- Travelling cables: - 20 years
- Inverter Drive: - 20 years
- Buffer: - 20 years
- Controller & circuits: - 20 years
- Contactor / Relays: 10,00,000 operations

Note: Documentary evidence to that effect is to be uploaded in Packet ‘B’.

2 DRIVING MECHANISM & ACCESSORIES

2.1 Lift Machine: The lift machine shall be suitable for 415 volts, 3 phase, 50 Hz AC supply with a voltage variation of +10% and –10% and shall be placed directly above the hoist way on steel beams resting on machine room floor slab.

The lift machine shall have high efficiency, high power factor and low power consumption and shall be designed to withstand peak currents in lift duties. Resilient anti-vibration mountings of suitable design shall be provided to minimize vibration transmission to the building structure. The assembly is to be designed & tested to sustain contract load plus 25% overload.

2.2 Machine Room Lift: - The Lift machine shall be of gearless type with permanent magnets placed directly above the hoist way.

Means of manual operation of the lift car shall be made by providing winding wheel suitably marked to indicate the direction of the movement to enable to lift car to be brought to the nearest landing.

There shall be a safety switch to switch off electrical supply if the manual cranking wheel is engaged before the manual operations.

The machine is gearless then it shall consist of a motor traction sheave and brake drum or brake disc completely aligned on a single shaft. Gearless machine shall be AC gearless with VVVF drive.

2.3 Hoist Motor

The Permanent magnet synchronous Gearless, Energy Efficient, electric hoist motor of suitable KW with traction pulley, over speed safety Governor (OSG) electromagnetic brakes to be installed. It shall have bearing specially built for heavy duty hoisting service. The entire assembly mounted on adequate size girders duly fixed on shaft walls complete with main / diverter traction sheaves, suspension wire ropes, belts of adequate size & strength or as per manufacturer’s standard.

The motor shall be conforming to relevant I.S. or International Standards and shall be able to withstand all the routine as well as type tests, as specified in I.S. or relevant International Standards.

It shall be also suitable for frequent reversals, high starting torque and low starting current with Class ‘F’ Insulation, Minimum of permissible, operations per hour shall not be less than 120.

The motor shall be rated for 30 minutes continuous service with 115°C rise above ambient temperature. The motor noise shall not exceed 55 dB on No-Load. The motor vibration shall not exceed 0.45 m/sec on No-Load.

The motor shall be designed in such a way to withstand occasional over loading of one fourth of rated capacity.

The motor shall have a good speed regulation under different conditions of loads. The windings shall be robust in design and adequately insulated for tropical climates and mechanically strengthened with double varnishing.

The motor of lift machine or the worm shaft shall be arranged so as to provide hand winding facilities, with suitable marking for up and down direction of travel of the lift cage.

Electric motor shall be of suitable duty, energy efficient and working on 3 ph. A.C. 50 c/s electric supply. The motor shall be installed using heavy duty channel of suitable size & using anti vibration rubber pads to damp vibration. The thickness of the rubber pad should be minimum 25 mm. The noise level shall not exceed 60 dB at one meter distance from Machine.

2.4 ANTI-VIBRATION SUPPORTS

The whole traction machine shall be mounted on appropriate anti-vibration supports to minimize noise and vibration.

The lift shall be provided with A.C, variable voltage, variable frequency, microprocessor-controlled motion and drive control system. The bidder shall indicate the model No. name of manufacturer and country of origin being provided, and the cable size required.

2.5 Brakes

The electromagnetic brake or permanent magnet brake shall be spring applied and electrically released. It shall come into action after the lift has come to a complete halt to hold the car in position. The brake shall operate automatically with the safety devices and failure of the mains. It shall be released electrically. It shall be possible to release the brake manually – such release requiring the action of manual force to move the lift in short stops for machine above equipment. In case of machine room less lift, lift contractor shall provide suitable means to hand wind or lower the lift from a remote point.

1. The brake shall be capable of stopping and holding the Lift car in its downward travel to rest with 125% of its rated load from the maximum governor tripping speed. In this condition the retardation of the Car shall not exceed that resulting from the operation of the Safety gear or stopping on the buffer.
2. Springs used to apply the brake shoes shall be in compression and adequately supported.
3. Brake linings shall be of renewable incombustible materials and shall be secured to the brake shoes such that normal wear shall not weaken their fixings. Band brakes shall not be used.
4. No earth fault, short circuit or residual magnetism shall prevent the brake from being applied in the event of loss of power supply to the Lift motor and control circuit.
5. A means of adjusting the brake plunger stroke and releasing the brake in emergency shall be provided.
6. The Lift machine shall be fitted with a manual emergency device capable of having the brake released by hand and requiring a constant effort to keep the brake open.
7. The fail-safe break shall incorporate an approved design of brake switch i.e. pick up, hold, discharge. Brake coil shall be wired in series & their respective switches in parallel. The operation of brake shall be thyristor controlled from solid-state drive-in order to effect minimum pick up time and synchronized start.
8. Dynamic braking system shall be provided by the contractor for all the lifts.

2.6 Governor

Governor shall be placed where it cannot be struck by the lift car or counter – weight in the event of over-run.

Governor for car safety gears shall be adjusted to actuate the safety gear at not less than 115 percent of rated speed and the maximum Governor tripping speed shall be not more than 140% of rated speed. No Governor shall be required to operate the safety gear at less than 45 mm. per minute.

Governor shall be marked with its tripping speed in terms of car speed in meters per minute and shall be provided with suitable casing.

The motor control and brake control circuits shall be opened before or at the time the Governor trips.

Governor ropes shall not be less than 6 mm. in dia. and shall be of traction steel and of suitable construction. The ropes shall run clear of the governor jaws during normal operation of the lift. Governor gears shall have self-lubricating bearings so as not to require frequent attention.

2.7 Ropes

The hoist ropes shall be of traction steel of suitable size, construction and number to ensure proper and smoothest kind of hoisting service and satisfactory wearing qualities.

The ropes shall be non-spinning type having safety factor not less than twelve. The tension in a suspension rope shall be related to the operating conditions as a whole e.g. rope speed, ratio of diameter of pulley, sheave, type of rope groove and intensity of service as well as to its breaking load.

Every lift car or counterweight rope shall be in one length and free from joints. The car and counter weight ends of the suspension rope shall be fastened by spliced return loops, clipped returned loops or individual tapered Babbitt sockets. Loops shall not bear directly on their fixing, but shall be lined with proper thimble eyes or equal protection.

In all cases, the fastening shall be capable of sustaining a load not less than 80 percent of the ultimate strength of the undisturbed rope.

Means shall be provided to equalize the load on the individual suspension ropes. Tensioning devices for compensation ropes, governor ropes and the like shall be protected against damaged due to falling objects. **The minimum diameter of ropes for car and counterweight shall be not less than 8 mm.** A substantial handhold shall be provided at a convenient height surrounding the guard but clear of the ropes. Suitable degreasing arrangement shall be provided in the machine room.

The suspension ropes shall conform to I.S. 2365/1977/ I.S. 2366/2002 / I.S. 14665:1999-2000 Part-I to Part-5.

Alternative STM (suspension traction media) than specified conventional ropes, if approved by PWD/Lift Inspectorate, shall be accepted.

3 Control Systems

3.1 Controller

The lifts shall have state of art microprocessor-based AC variable voltage variable frequency (ACVVVF) drive.

The lift controller shall be wall/floor mounted, vertical, totally enclosed cubicle type with hinged doors on the front and/or the rear to provide easy access to all components in the controller. The cubicle shall be well ventilated such that the temperature inside never exceeds the safe limits of the components at ambient room conditions in the machine room.

The controller shall operate within the supply voltage variation of plus 5% to minus 10% of the nominal voltage. An inbuilt voltage stabilizer shall be provided in the controller for the purpose.

The controller shall be complete with relay protection against the following:

- Over current
- Under voltage
- Single phasing
- Phase reversal
- Earth leakage
- Over voltage – 3 Phase
- Spikes & Surges

Control panels & drive systems shall be designed to meet the requirements laid down by the EN12015 standards relevant to Electro-Magnetic Compatibility (EMC).

Main circuit board and circuit breakers inside controller manufactured only by OEM shall be acceptable

Lift motor control system shall be electronic closed-loop control to ensure fail safe motor over speed controls and stopping accuracy of ± 10 mm.

Load compensation circuits shall also be included to further improve upon the levelling accuracy. The levelling shall be ensured within ± 10 mm.

An Automatic Phase reversal device shall be provided on the controller which shall be designed to protect the lift equipment against phase reversal and phase failure.

The controller shall be designed to cut off the power supply, apply the brake and bring the car to a rest in the event of any of the above failures occurring.

System should automatically restart when power is restored.

Lifts should not go in to correction mode or correction run to the lowest floor / highest floor to update its position & memory.

The acceleration and deceleration shall be adjustable at site using a service tool.

3.2 VVVF DRIVE UNIT

Lift drive controls shall be A.C. Variable Voltage Variable Frequency Drive System with microprocessor based site programmable controls.

In normal operation, the electromagnetic brake shall only be applied when the lift has come to a complete standstill. The brake shall hold the lifts in position at every landing, and shall provide stopping without any jerking effect.

The VVVF Drive shall employ Sine wave PWM control with 12 pulse drive & shall be designed to run at an ambient temperature of 50 Degree Celsius & maximum relative humidity of 90%.

The VVVF drive shall be vector with flow closed loop control always.

Shielded cables to be used to cover the path from inverter output terminal box to motor terminal box; this is required to reduce EMI or radio disturbances.

Input filters to be used at inverter input to reduce disturbance to power supply.

Due to standing wave phenomenon, high voltage spikes get generated at motor terminals operated with VVVF drives. This results into premature burn out / failure of motor winding. To safe guard motor against these voltage spikes, VVVF drive shall consist of appropriate protection device at output of the inverter.

Following protections shall be built in with the inverter: -

- Motor overload / over torque
- Instantaneous over current
- Ground fault
- Under voltage
- Over voltage – 3 Phase
- Output & Input phase loss
- Output short circuit
- Over speed
- Spikes & Surges

On fault occurrence, the VVVF drive shall store the status of all parameters prevailing at the time of fault occurrence etc. & the same shall be available to the user to assist him in the fault diagnosis.

3.3 FIRE MAN OPERATION

All building with height more than 15m shall have fireman's lift. The technical parameters define the fireman's lifts. This shall always be in line with the latest IS codes amended up to date even if the below description is found as different from the latest amended IS codes.

3.3.1. Operation Requirement of fireman's lift/s: The fireman's lift shall be provided with the following as a minimum: - A two position ON/OFF fireman's switch which is common to all lifts in a group control at evacuation floor (normally the main entrance floor) protected in a box with glass in front with suitable label indicating that it is the fireman switch and Audio & visual signal in car

3.3.2. Sequence of operation: Return to Evacuation floor (Phase 1): Shall start when the switch at the evacuation floor is turned to the 'on' position or the signal indicating a fire received from the automatic fire detection and alarm system (if provided by the BMS) is on. The lift(s) controlled by this switch shall cancel car calls and separate from landing calls and no landing or car calls shall be registered. The audio and visual signal in car shall be turned on. All heat and smoke sensitive door re opening devices shall be rendered inoperative. If the lift is travelling towards evacuation floor, it shall continue driving to that

floor. If the lift is travelling away from the evacuation floor, it shall reverse its direction at the nearest possible floor without opening its door and return non-stop to the evacuation floor. If the lift is standing at a floor other than the evacuation floor, it shall close the doors & start travelling nonstop to the evacuation floor. When at the evacuation floor, the lift will park with doors open. The audio signal is turned off after this drive.

Fireman's Service: The phase 2 is started after phase 1 if the fireman's switch is on. The lift does not respond to landing calls. All heat and smoke sensitive door re opening devices shall be rendered inoperative. When the car call button is pressed the doors start closing. If the button is released before the doors are fully closed, they reopen. The car call is registered only after the doors are fully closed. After registering a car call the lifts start driving to a call. If more than one car calls are registered, only the nearest call is answered & the remaining car calls will be cancelled at the first stop. At the floors the doors are opened by pushing the door open button. If the button is released before the doors are fully open, they reclose. The lift returns to normal service when it stands at the evacuation floor with door open & the fireman's switch is off or by an electric signal from the automatic fire detection system when it is reset.

3.3.3. The word '**FIRE LIFT**' shall be conspicuously displayed in fluorescent colour near/on the lift landing doors at each floor. 5.8.4 Requirement for non-fire lifts: For buildings having height more than 15 meters, the non-fire lifts shall be taken out of normal services in the event of fire, by making use of the following provisions given below: - The non-fire lifts shall be provided with a manual two position (ON/OFF) fireman switch acting as a grounding switch on the main floor. The switch shall be common for all lifts in a group control. The switch shall be protected in a box with glass in front with suitable label indicating that it is fire switch. When a signal indicating a fire is received from the automatic fire detection and alarm system or from the grounding switch, the non-fire lifts shall react as follows: - All landing controls and car controls including the door re open button shall be rendered inoperative. All existing registered calls shall be cancelled; and The lift shall follow the automatic command initiated by the received signal in the following way: A lift with automatic power doors when parked at a landing shall close the doors and travel non-stop to the evacuation landing; A lift travelling away from the designated landing shall make a normal stop and reverse its direction at the nearest possible landing without opening the doors and return to the evacuation landing; A lift travelling towards the designated landing shall continue its travel nonstop towards it. A lift in the event of becoming blocked due to the operation of a safety device shall remain immobilized. Page 81 of 148 Door reversal devices, which may be affected by heat or smoke, shall be rendered inoperative to allow the doors to close. The breakdown or shut down of a lift in a group of interconnected lifts shall not affect the return of the other lifts to the evacuation landing. On arrival at the evacuation landing, lifts shall park there with the car & landing doors open & removed from service. Note: the doors may close after predetermined time but it shall be possible to open them with landing call button and manually with emergency key.

The lift will automatically be reset to normal operation by:

An electrical signal from the automatic fire detection system when it is reset; or the rest of the manual grounding switch.

In case there are fire as well as non-fire lifts in a group control, the common fireman-cum-grounding switch should function as fire switch for fire lifts and as grounding switch for the non-fire lifts.

The fireman's switch shall be located adjacent to the lift opening at the evacuation floor and shall be at a height of approximately 2 m above the floor level.

3.4 Automatic Rescue Device (A.R.D.):

The ARD shall have the following specifications:

- ARD should move the lift to the nearest landing in case of power failure and single phasing during normal operation of lift.
- ARD should monitor the normal power supply in the main controller and shall activate rescue operation within 10 seconds of normal power supply failure. It should bring the lift to the nearest floor at a slower speed than the normal run. While proceeding to the nearest floor the lift will detect the zone and stop. After the lift has stopped, it automatically opens the doors and parks with door open. After the operation is completed by the ARD the lift is automatically switched over to normal operation as soon as normal power supply resumes.
- In case the normal supply resumes during ARD in operation the lift will continue to run in ARD mode until it reaches the nearest landing and the doors are fully opened. If normal power supply resumes when the lift is at the landing, it will automatically be switched to normal power operation and start from there instead of getting into correction mode and going to lowest floor.
- All the lift safeties shall remain active during the ARD mode of operation □ Audio / Visual alarm to be provided in car to announce ARD operation; voice synthesizer to make an announcement that lift is running to floor level on emergency power and to exit upon arrival.
- The battery capacity should be adequate so as to operate the ARD at least three (03) times without recharging of battery.
- ARD should also operate in case of Single-phase failure.

4 STANDARD FEATURES TO BE INCLUDED

4.1 OVER LOAD DEVICE

A load weighing device shall operate when the load in the car exceeds the rated capacity. The operation of the device shall activate buzzer sound and flashing 'overload' signals. At the same time the car doors shall be prevented from closing. When the excess load has been removed from the car, the buzzer alarm shall stop automatically and the car shall function normally. The sensitivity shall be 30 kg for Passenger lifts and 5% of the contract load for service lifts. The load sensing shall be achieved either by way of load sensors placed under car platform or rope/ belt tension device as per manufacturers standard design. The load sensing device should be site- programmable/adjustment type.

4.2 AUTOMATIC SELF-LEVELING

All lifts shall be provided with automatic self-levelling feature that shall bring the lift car level to within $\pm 5\text{mm}$ to $+ 10\text{mm}$ for passenger/service lifts and $+ 10\text{mm}$ for freight lifts of the landing floor regardless of load or direction of travel. The automatic self-levelling feature shall correct for over / under travel.

4.3 ALARM BELL/BUZZER

An Emergency alarm bell/ Buzzer, including wiring to be provided and connected to a properly marked push button in the car operating panel. The alarm bell shall be located at the ground floor, at the floor landing outside and adjacent to hoist way or as desired by PFCL. The alarm sound shall be siren type audible from at least 50 meters from the ground floor landing, operated by Rechargeable Nickel/Cadmium maintenance free batteries to give a warning siren when the alarm button in the car is pressed momentarily.

4.4 ANTI-NUISANCE

If car loading relative to weight in car is not commensurate with number of registered car calls, the system cancels car calls. Systems employing either load weighing or door protective device for activation of this feature are acceptable.

4.5 SAFE LANDING FEATURE

If a car has stopped between floors due to some equipment malfunction, the controller checks the cause, and if it is considered safe to move the car, the car will move to the nearest floor at low speed and the doors will open.

4.6 Door Failure Operation

When an obstruction prevents a door from opening, the controller shall attempt its removal by repeated opening and closing, failing which the car shall travel to the next floor.

4.7 Self - Diagnostic Facility

The Controller shall perform self - diagnostic tests and report the health of the system. The system shall take care of minor faults like door operation and motor overheating. A universal service tool shall be provided in each machine room to assist technicians in quick pin-pointing of mal-function.

4.8 INDEPENDENT SERVICE

Under this operation the car is withdrawn from the group control operation for independent use, such as transporting goods, carrying large number of people between floors or maintenance & at such times only responds to car calls. The lift will remain parked on a floor with its doors open until a floor is selected and the door close button is held until the lift starts to travel. The switch for this service shall be located inside the lockable service box in Car operating panel.

4.9 RETURN OPERATION

Using a key switch on the face plate at main lobby floor, a lift can be taken out of the group control operation & brought to the main lobby floor (or other designated floor). The car will park on that floor with the doors open till independent operations begin.

4.10 CAR CALL CANCELLATION

This function allows passenger to cancel the selection of a floor which is accidentally pressed by pressing the button again.

4.11 DOOR NUDGING

If the Elevator doors are kept open longer than the pre-determined time, an override alarm shall sound and start to close at a slower speed to alert the passenger that the doors must close so that system performance is not adversely affected.

5 CAR ENCLOSURE

5.1 Lift Car

Lift car shall be enclosed on all sides by means of the cage body, gates or doors and such enclosure shall be at least 2.1 meters in height in false ceiling.

The car interior (walls and roof) shall be made of stainless steel 304 sheet of 1.5 mm thick with hairline finish with frame made from MS girders, bracing of adequate size with minimum safety factor of 5, with Toe Guard apron. Hand rail shall be provided inside the lift car. Car door from internal side may have mirror finish panel in combination with other selected panel finish. Suitably designed modern attractive false ceiling with appropriate nos. of energy efficient LED fittings covered with non-accessible glass to avoid contact/theft of LED lights, shall be provided. The lift car shall be fitted with at least one similar Emergency light fitting complete with 2 nos. of cabin type noiseless fans for adequate ventilation. Decision regarding approval of 'Total Car interior design' will be taken by concerned site-engineer in-charge. His decision shall be final and binding upon the lift manufacturer. Minimum car area shall be specified in accordance with the requirements of the B & C Department of the Maharashtra State.

The car shall be provided with an emergency stopping device and an alarm signal, both operated by a push button switch, which shall be clearly marked. The alarm shall be clearly audible in the lift well and nearby passages, in order to obtain assistance in case of break down or failure between the floors.

The car may have stainless steel luminary flush panels and be provided with suitable/rounded corners. The material and/or finish of the car body work shall be durable to withstand frequent washing.

The amplitude of vibration in the car cage shall not exceed 25 microns in running condition and 10 microns in standstill condition.

A solid roof capable of supporting 150 Kg. shall be provided. Roof of car shall be fabricated in painted/powder coated M.S. framework while false ceiling shall be made in relevant selected S.S. finish panel.

The car entrance shall be protected by a centre opening sliding steel door or two speed telescopic S.S. doors as the case may be. Gate/door shall be hung on a steel track by ball bearing hangers and guided on a finished heavy section grooved sill on the car platform.

The car gate/door shall be equipped with an electric motor / suitable mechanical device, which shall prevent the movement of the car unless the gate / door is properly closed.

The enclosure and door including their tracks shall withstand a thrust of 35 Kg. supplied normally at any point excepting vision panel without permanent deformation. The car platform shall be constructed of structural steel shapes securely fastened together and designed on the basis of contact load evenly distributed. The minimum factor of safety shall be 5 for steel. **The car frame**, which supports the car platform and enclosure, shall be made of structural steel and it shall be equipped with suitable guides and safety devices mounted underneath the car platform.

S.S. chequered plate for flooring shall be of 3 mm thick or as per manufacturers standard. The factor of safety of the component parts and their connections shall not be less than 5 based on the ultimate strength of the materials and the static load imposed on them.

Car operating panel (COP) shall also have 'key switch' to keep the car operation in 'ON' or 'OFF' mode, in addition to normal provision of 'Attendant Key switch' & other necessary buttons. Overload Warning Device (OWD) with Audio-visual alarm, voice annunciation system (VAS) In MARATHI, Hindi & English or as per manufacturer's standards with intercom system and telephone instrument in Lift car, near control panel & Ground Floor.

Display / position indicator inside the car, shall preferably be fitted above car doors or at suitable location which shall be easily viewable.

5.2 CABIN FAN

At least One/ two numbers Noiseless pressure fan or blower with Auto ON/OFF shall be provided in each lift cabin with supply grill matching with the interior of the car. Airflow in the car should be such that adequate amount of airflow reaches all parts of cabin. One of the Fan / Blowers shall be connected thru a rechargeable UPS to ensure continuous blower operation for at least 15 minutes in event of power failure.

5.3 EMERGENCY LIGHTS

In addition to normal lighting an emergency light unit using sealed Nickel/Cadmium Maintenance free battery power pack with charger and fluorescent lamp to operate automatically and to illuminate the car for minimum 30 minutes in case of power failure shall be provided in each lift car.

5.4 CCTV surveillance system (Not Applicable)

CCTV surveillance system comprises of 2 nos. minimum 2.0 MP FHD IP based vandal proof Dome camera in lift car & in LMR/inside lift shaft top aimed on Lift machinery 7 controller with NVR kept in LMR/FCC with HDR data backup for 60 days with 18" FHD TV monitor, to be kept in FCC/LMR as directed by Engineer IN charge.

6 CAR & LANDING DOORS

6.1 Landing Entrances

The entrance on the landings from the hoist way side shall be fitted with automatic, side/center opening two speed telescopic S.S. doors with a clear opening as required at each landing complete with top and bottom tracks, etc.

Car and Door shall be as per fire protection norms of Indian / International standards.

Every landing gate shall be fitted with electrical and mechanical interlocks, which shall comply with the appropriate requirements given below:-

- i) It shall not be possible to open the landing gate from the landing side until the lift car is within that particular landing zone. Provision shall be made for opening the gate in case of emergency by means of special key at terminal floors.
- ii) The lift cannot be started or kept in motion unless all the landing gates are closed and locked. The electrical and mechanical parts of all locking devices shall be of substantial design and construction. The removal of any inspection cover or covers shall not affect the operation of a device. All locking devices shall be fixed securely to the enclosure by suitable means.
- iii) Each landing gate should have both electrical & mechanical locking system. After closing the gate electrical contact should not be made unless and until the mechanical locking is done.

The locking device for landing gates shall be so designed that the lock contact shall not be closed until the gate is closed. Any springs used in the locking device shall be in compression and properly supported. Contacts shall be solid type, pivoted or hinged and of sturdy construction.

- iv) The design shall be such that reasonable wear between working parts does not permit of interference with the operation of the lift by movement of the lock handles.
- v) The conduit / troughing carrying the conductors to the lock shall be securely fixed to the boxes and shall maintain electrical and mechanical continuity.
- vi) The levers operating the mechanical parts of the locking device shall be protected from interference from the landing side of the lift enclosure.
- vii) The provision to prevent the opening of any landing gate when the car is passing that zone in response to a call from another landing, shall be made for the lift.

6.2 Electric Door Operator for Car Door and Hoist way Doors

Contractor shall furnish and install Electric Door Operators for opening and closing the car door and the hoist way door. The equipment shall consist of a machine on the elevator car, operating the car door when the car is stopping at a landing. The car door and hoist way door shall be mechanically connected and shall move simultaneously in opening and closing.

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

Each hoist way door shall be provided with an inter-lock, which shall prevent movement of the car away from the landing until the doors are locked in the closed position and should meet relevant IS codes.

An electric contact for the car door shall be provided which shall prevent car movement away from landing unless the door is in the closed position as defined in the ISI Codes.

Necessary switches shall be provided in the elevator machine room to control the operation of the doors.

The car door and the hoist way door shall open automatically when the car stops at a landing. The closing of the car door and the hoist way door must occur before the car can be started. Doors can be stopped and reversed during their closing motion, as soon as infrared curtain beam provided on either side of door is cut/activated, the door shall automatically close after predetermined time interval.

Contractor shall furnish and install for the car and each landing sliding door, sheave type two point suspension hangers complete with tracks, Sheaves and rollers shall be of steel and shall include shielded ball bearing to retain grease lubrication. Adjustable ball bearings rollers shall be provided to take the upward thrust of the doors.

Tracks shall be of suitable steel section with smooth surface, landing gates/doors including hangers and tracks shall withstand a thrust of 35 Kgs. applied normally at any point except vision panel without causing any damages. S.S.304 grade panels used for car and landing doors shall be of 18 SWG.

7 CAR SIGNALS & OPERATION DEVICES

7.1 Indicators and Signaling System:

Signaling system shall be of all bell type and the lift should be provided with –

- A. Manual reset light annunciator mounted flush in the car and connected to one heavily insulated type of call buttons at all landings including all wiring, bell transformers etc. The car annunciator box shall contain a single/double row of light indicators numbered to correspond to the various landings.
- B. Luminous UP/DOWN indicators incorporated in push button face plates shall be provided at all landings.
- C. Illuminating type hall position indicator on all landing to indicate the position of the car on the hoist way.
- D. Illuminating type & audio announcement of car position indicator in the car.
- E. The signaling system shall work on main supply and during ARD operation as well.
- F. The wiring for the same shall be independent of the lift wiring.
- G. Display at all floors and in car.
- H. LCD / LED display at Ground Floor.
- I. LCD / LED display inside the Car at suitable height.
- J. Infrared safety throughout the door height is preferable.
- K. Automatic Rescue Device.
- L. Alarm bell shall be operated on D.C. battery.
- M. Firemen switch on ground floor as per fire protection rules.

- N. Over load indicator - The lift shall be equipped with a system of over passenger over load Safety. In case the persons or load exceeds the rated capacity of elevator, it will not start at all. The system shall be with audio and visual indication.
- O. Floor-Numbers on the Car Operating Panel & Landing Operating Panel should also be Present in “Braille” character / font of sufficiently large dimensions, suitable for differently abled.
- P. Hot-line communication between lift car and control center shall be provided along with necessary instruments, in case of lift breakdown.
- Q. Chime / gong producing sufficiently loud audio signal along with visual light signal shall be provided at each landing when lift reaches any of the landing position, to indicate lift arrival at that landing.
- R. The written visual indication of overload capacity at each landing in each car shall be displayed.

7.2 Infrared Light Curtain

The lift doors shall be provided with a safety device in the form of infra red light curtains. This shall prevent the lift doors from closing, in case of any obstruction. This infrared light curtain should have no effect of ambient light on its operation. Any faulty beam should be detected and fault indicators should turn on to inform the operator about the fault status.

This light curtain should be housed / embedded in a mechanical safety edge to give double protection on door detection. In case of failure of infrared light curtain, this conventional mechanical edge safety should extend protection to humans while entering the lift.

8 LIFT SHAFT & PIT

8.1 Guides

Car guides and counterweight guides shall be as per manufacturer’s standard, guides shall be continuous throughout the entire length and shall be provided with adequate iron or steel brackets or equivalent fixing.

It will be designed and spaced in such way that the guides shall not be deflected more than 5mm under normal operation. Guide brackets and shims, if any, shall be of steel and shall not be directly supported and fastened to the lift well enclosure walls unless such wall is of such construction and strengthened as to adequately withstand the thrust imposed on the guides under all conditions of the lift service. The fastenings shall be built in the walls by means of bond blocks or expansion bolts or through bolts with metal plates of such thickness and size as to adequately distribute the load on the wall.

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

Regular greasing and lubrication is to be done as required. Oil shall be distributed evenly to the guide rails and the rate of feed shall be adjustable.

8.2 Buffers

Spring type buffers shall be fitted below the lift cage. Buffers shall be placed symmetrically with respect to the center of gravity of the lift cage within a tolerance of 5 cm. and shall be so arranged that the lift cage in ordinary circumstances of the operation, cannot strike them.

Counter weight shall be fitted with buffers, similar to those specified for lift cage and arranged symmetrically below the weight.

Buffers in the pit shall be mounted on the steel channel/concrete blocks, which extend between both car and counter weight guide rails provided by the contractor.

For speed less than or equal to 1.5 mps, suitable heavy-duty spring buffers shall be placed below the car and counter weight but in the pit & arranged to sustain any shock, should the lift over travel past the terminal limits. Buffers shall be mounted on RCC foundation blocks. Dowels for the purpose shall be left while casting the pit floor alternatively floor reinforcement could be exposed by chipping for welding additional reinforcement for dowels. Clearance from underside of the car resting on a fully compressed buffer shall not be less than 1.20 mtr. Buffers shall be designed for a design speed + 15%. Oil buffers shall be provided for the passenger lifts for speed of more than 1.5 mps and for Machine room less lifts for all speeds. The normal operation of the lift shall depend on the return of the buffers to their normal extended position after operation. The device for checking this shall be an electric safety device mounted on the buffers.

8.3 Counter Weight

Frame type counter weights made of cast iron shall be employed. The sections being secured by rods passing through holes in all sections, having locknuts at each end, further secured by solid pins. Factor of safety of the threaded portion of the rods shall be not less than ten.

The traction shall be such that no appreciable slip shall occur under normal conditions but that slip shall be free to take place upto the landing of either the car or the counter weight.

The guide shoes of counterweight shall be fixed and adjusted so that play in the direction of the width of the counterweight does not exceed five mm.

Adjustable guide shoes on counterweight shall be so designed that their correct adjustment shall be maintained independent of the tightness of bolts or set screws through slotted holes. Rod type counterweight shall be slotted for use with the steel guides in which case separate guide shoes need not be fitted.

The counterweight shall be equal to the weight of the complete car and approximately 40% of the contact load. The operation shall be smooth and economical.

A substantial metal counterweight guard with steel frame work of required length shall be provided at the bottom of hoist way.

Alternative arrangement for holding the counterweights in steel frame, if any, as approved by PWD/Lift Inspectorate, shall be accepted.

9 SAFETY DEVICES

9.1 Emergency Safety Devices

The lift shall be provided with one or more car safety devices, attached to the lift car frame and preferably placed beneath the car. The safety devices shall be capable of stopping and sustaining the lift car with rated load in the car.

The safety gears to be used shall be of the following types:

- a) Instantaneous type limited to speed not exceeding 60 Mtrs./min.
- b) Gradual wedge clamp (GWC) type with gradual increasing retarding force.
- c) Flexible guide clamp (FGC) type with constant retarding force.

The lift shall be equipped with an over speed governor device, which shall operate to apply the safety gear in the event of the speed of the lift car in the descending direction exceeding a predetermined limit.

The operation of the safety devices shall not cause the lift car platform to become out of level in excess of 3 cm. per meter measured in any direction.

When the safety gear comes into operation, it shall automatically open the operating circuit but it shall be possible for a responsible person to release the safety gear after a thorough inspection of the equipment and taking of any necessary precaution by reversing the direction of the motion of the machine.

The safety device shall be such that it can be released as soon as the lift car is raised.

The safety gear shall operate to stop and sustain the lift car in the event of failure of the suspension ropes or in the event of the lift exceeding a predetermined maximum speed in the descending direction.

Every safety gear shall operate positively and mechanically independent of any springs/used in its construction. Keys of good quality shall key any levers or dogs operated by shafts to such shafts.

The design of the safety gear shall provide for its application to both guides and to each side of such guides substantially equal. Any additional rope used solely for the purpose of operating the safety gear shall be laid over independent pulleys, running on independent shafts.

All bearings for drums and shafts in connection with the safety gears shall be of non-ferrous metals.

No safety gear shall depend on the completion or maintenance of an electric circuit for its operation. All safety gears shall be applied mechanically.

The gripping surfaces of the car or counter weight safety gears shall not be used to guide the lift cage or counter weight but shall run free of the guides during normal operation of the lift (A rail or ratchet shall not be held to constitute a sufficient safety for lift traveling in a vertical or substantially vertical direction).

9.2 Limit Switches

Lift shall be provided with upper and lower normal terminal limit switches to stop the car automatically within the limit of top of car clearance and bottom run (by over travel) from any speed attained in normal operation. Such limit switches shall not be independent of the operating device, ultimate or final limit switches and the buffers.

Normal terminal limit switches shall be fitted in the lift car or in the lift well or in the motor room and such switches shall be brought into operation by the movement of the lift car. The switch and the spring buffers shall be so arranged that the switch shall open before the buffers and engaged.

Ultimate or final limit switches shall not be mounted on the lift cage and shall be operated by the movement of the lift car in the lift well within the limits of normal travel.

Ultimate or final limit switches shall not control the same switches on the controller as those are controlled by the terminal limit switches unless two or more separate and independent switches are provided, two of which shall be closed to complete the motor and brake circuit in each direction of travel, when the ultimate or final limit switches control the same switch or switches on the controller as the operating device or the terminal limit switches, they shall be connected in the control circuit on the opposite side of the line.

Ultimate limit switches designed to open the main circuit of the motor may control the same switch or switches on the controller as those controlled by the terminal limit switches but when such ultimate limit switches are employed on direct current power supplies they shall be provided with additional contacts to control the brake circuits.

All ultimate or final limit switches shall be of enclosed type and shall be mounted properly. The movement of the lift car shall open the contact of all such switches positively and mechanically.

9.3 Pit Flood Switch

Elevator Pit Flood Switch Features:

- 1) Stainless Steel adjustable float switch
- 2) Normally Open contact rating: 220VAC - 2.5A - 50W
- 3) 3/8 throw to activate
- 4) Electrical knockouts for 1/2 liquid tight fittings

The PFS Elevator Pit Flood Switch is mounted a few inches from the bottom of the elevator pit and will activate when it comes in contact with water. The float of the switch will rise when it contacts rising water, and when it is raised 3/8, a normally open contact will close.

Please note that Vator Accessories is providing the float switch and enclosure only. The switch will need to be wired to the controller by a trained technician. The controller will require the logic to follow the recommended operation below:

Recommended Operation

1. PFS detects rising water in pit
2. PFS normally open contact closes
3. The controller receives the closed contact signal
4. The elevator automatically travels to the uppermost floor, doors open and remain open
5. The elevator remains at the upper floor with the doors open until it is reset by a qualified Elevator Mechanic or Elevator Inspector

10 OPERATION AND WIRING

10.1 Operation:

Operation of lift shall conform to the following requirements:

10.1.1) It shall not be possible to start the lift car under normal operation unless every landing gate is in the closed position.

10.1.2) The landing push buttons shall be operative during the whole time when an occupied lift car is in use. The landing push buttons shall register the call but the lift remains inoperative until the person or persons, using the lift have vacated the lift car and the landing gate has been closed. An emergency stop switch shall also be fitted on the top of the lift car for use of persons working thereon.

10.1.3) Momentary pressure of a car button shall send the car to the landing selected where the car shall automatically stop. After a car button is pressed, uninterrupted use of the car shall be ensured until the desired landing is reached and the car gate is opened and closed.

10.1.4) Momentary pressure of a landing button shall bring the car to that landing unless the car is already in use.

10.1.5) Every precaution shall be taken to ensure quiet operation of lift doors and machinery. The installation of the lift machine and any motor generator set shall prevent most of the noise by providing rubber cushions.

10.1.6) The lifts in the scope of work, shall operate on full collective selective with ON/OFF switch.

10.2 Electrical Wiring:

10.2.1) All electric supply lines and apparatus in connection with the lift installation shall be so constructed and shall be so installed, protected, worked and maintained that there may be no danger to persons there from.

All metal casing of metal coverings containing or protecting any electric supply or appurtenances shall be effectively earthed.

Suitable Caution Notice shall be affixed near every motor or other apparatus in which energy is used at a pressure exceeding 250 Volts.

The copper armoured cables shall be fixed on wall / ceiling from Switchgear at Meter room through the lift well to switchgear at distribution position in designated place.

10.2.2) The Tenderer shall lay the electric cable from meter room to Lift machine room, complete with earthing wires and provide switchgears etc. In no case the work of Erection, Testing and Commissioning shall be held up for want of electric supply from Corporation.

10.2.3) For the purpose of fabrication, erection and testing etc. to complete the job, tenderer shall use available supply on the site and shall pay charges of **Rs.2000/-** per Lift.

10.2.4) On carrying out complete wiring work, tenderer shall arrange to submit test report to Electric Supply authorities and get the meter connected and kept the lift ready for Testing and inspection of P.W.D. Inspector.

Please refer complete details of electrical wiring works in the respective specifications onwards.

10.3 Connectivity to Building Management Services

The Contractor shall provide potential-free connectivity and communication ports for all elevators to Building Management System.

10.4 Data Storage and Retrieval

Data from daily operations shall be stored in the control system and shall be retrievable. Data shall include all particulars of calls, mode of operation, door open/close, acceleration / deceleration, stops, status etc. The contractor shall specify in his offer the full capability of his system in this regard. It should be possible from such retrieved data to prepare an up-dated traffic analysis at any time.

10.5 Fire Alarm Home Landing (Through BMS)

The contractor shall provide only potential free contacts and communication ports for fire alarm home landing through BMS.

11 Electrical Work

The electrical work shall be carried out as per General & Technical Specifications specified in Unified SOR 2018, using FIRST CATEGORY material approved in unified schedule 2018 or as per manufacturers standard with FRLS cable

11.1 The electrical work comprises of following works (Applicable to all lifts)

One 5A - 5 pin socket with switch in GI enclosure of suitable size and one light point with switch & 28W LED light, shall be provided in lift pit and at each landing in lift shaft, complete with wiring in approved manner.

A set complete with one 23/28 W LED light of approved make, 3 meter long PVC 3 core flexible cord terminated in 3 pin plug, shall also be supplied for each lift, for maintenance staff.

All the lights and outlet points shall be connected to a separate circuit independent of lift mains and control wiring.

Lift contractor shall carry out the necessary wiring in the conduit / troughing / cabling/casing - capping from the lighting D.B. in lift machine room.

11.2 Switch gears at Service & distribution position

(a) 63 Amp 440 V TPN with metal enclosure with fuse (one at service and one in each Machine room for every proposed lift at distribution position for all the proposed lifts.) – 2 Nos. for each lift.

(b) 32 Amp, 250 V, MCB (one at service and one in each Machine room for every proposed lift at distribution position). – 2 Nos. for each lift.

(c) 32 Amp DPMCB and 3 way 6 Amp SPMCB per way = 1 No each at distribution position in Machine room lighting for each lift – 1 No. for each lift.

11.3 E.L.C.Bs.

- A. 32/40 Amp 2 Pole E.L.C.B. Type B and complete with interconnection and wiring, M.S. enclosure = 1 No. for each lift.
- B. 63 Amp & 4 Pole E.L.C.B. Type B and complete with interconnection and wiring, M.S. enclosure = 1 No. for each lift.

11.4 M.S. Angle / Flat bar frame work (As per manufacturer's Standard)

Switchgear at service (in Meter room) and at distribution position (in Machine room) shall be fixed by using:-

- i) 40 x 40 x 5 mm of M.S. Angle
- ii) Flat bar: 40 mm x 5 mm thick.

11.5 Cable

The contractor shall provide 1.1 KV grade stranded Cu conductor, XLPE insulated, extruded PVC inner and FRLS outer sheathed, galvanised steel round or strip armoured cables for Power supply cable and lighting cable from service point to machine room for the lift, through lift shaft, lift shaft wiring and machine room wiring with switchgears, fittings and fixtures. The copper armoured cables shall be fixed on wall / ceiling from Switchgear at Meter room through the lift well to switchgear at distribution position in Machine room of followings: –

- a) Power Cable - 4 Core x 6 SQ MM .
- b) Lighting Cable – 2 Core x 2.5 sq.mm. Copper

2A.27.1 - Cable end terminations

Providing cable end terminations at incoming and outgoing end of copper armoured power and lighting cables-

- a) 4 Core x 6 SQ MM .
- b) 2 Core x 2.5 sq.mm.

(Note- old cable removed from site is to be hand over to concern MCGM department.)

11.6 Point Wiring

- a) Providing lighting wiring using copper cable of 2 core x 2.5 Sq.mm 1100 V grade with proper saddle support at 1 feet along the run of cable in lift pit and lift well for inspection and maintenance purpose. One ordinary lamp point and plug point of 5/6 Amp with S.P. Switch at lift pit and lift shaft top and midway shall be provided as per requirement
- b) Point wiring in Casing-N-Caping with 1.5 Sq. mm copper conductor, 1100 V grade shall be provided in lift each Machine room for 1 no. of exhaust fan , The exhaust fans shall be enclosed in safety covers/wire mesh.

11.7 Fittings & Fixtures

Following fittings and fixtures shall be provided: –

- i.) Ordinary lamp points at each floor in lift well and in lift pit with 18/23/28 Watt LED light as per point wiring provided at lift well, for every lift well.
- ii.) One no. of bulkhead fitting outside every lift Machine room with point wiring.
- iii.) One no. of Exhaust fan 380 mm sweep, 900 RPM, Single ph., 2350 CFM shall be provided for each lift Machine room as per point wiring in each lift Machine room.

11.8 Meter Leads

Providing 3 single core cu wires of 25 Sq.mm. sizes for phases and 1 single core wire of 10 Sq.mm for Neutral for 63 Amp TPN switch & 6 sq. mm cu wire for 32 A MCB, lead through PVC flexible pipe with proper fixing arrangement.

11.9 Earthing

a) The terminal for the earthing of the frame of the motor, the winding machine, the frame of the control panel, the cases and covers of the tappet switch and similar electric appliances, which normally carry the main voltage shall be as per IS 732-1958 Indian Electricity Rules 1956 & Electric Supply Co.'s Regulations as applicable.

The terminal for the earthing of metallic cases and covers of doors, interlocks, call and control switches, stop buttons, car switches, limit switches, junction boxes and similar electrical fittings which normally carry only the control current shall be at least equivalent to 5mm brass screw, such terminal being one specially provided for this purpose and the earth conductor shall be at least equivalent to 7/29 in copper conductor.

The Earthing conductor shall be secured to the Earthing terminal in accordance with the recommendations made in clause 7 of IS - 732 and also in conformity with Indian Electricity Rules 1956 as applicable.

The exposed metal parts of electrical apparatus installed in a lift car shall be earthed through wire ropes or ramp supporting in car, but shall not be earthed by means of an earthing conductor in the trailing flexible cable. One side of the secondary wiring of the bell transformers and their cases shall be earthed.

b) Separate Earthing conforming to IS-3043 shall be provided at service for the lift and earth continuity conductors shall be provided as follows:-

- i) Earthing station / plate of size 600 mm x 600mm x 3.15 mm tinned copper shall be connected with 2 nos. of tinned copper flat bars of size 25 x 3 mm upto earth chamber. These copper flat bars are to be connected to tinned copper. test link of size 32 mm x 6mm .
- ii) Earthing from test link to hoist machine, its support assembly & switchgear shall be done with 2 nos. of 10 SWG copper conductors terminated by lugs with double earthing as per requirement.

Note:-all electrical work shall be carried out as per Unified SOR 2018 and Technical specifications.

12 Civil Work

The scope of civil work consists of following works:-

- i.) Brick masonry wall works for & around landing doors, chipping of walls, door openings, fascia plates architraves, making holes in the walls / slab. Necessary civil work in all respect in lift shaft & lift pit required for foundation ~~with white glazed tiles on the wall and flooring, grouting etc.~~, complete with final finishing plaster, white wash. Making lift openings as per required size for landing doors.
- ii.) Tenderer shall examine the maximum bending moment of the beam & structural stability of lift shaft / structure, Lift machine platform etc. and suggest the strengthening if required with detailed working.
- iii.) A Firm, stable and sturdy scaffolding shall be erected in the hoist way for carrying out the lift work.
- iv.) Barriers should be provided across all open entrances to avoid chance of accident.

The necessary civil work which is not included in the specifications but required for commencement of lift in all respect, should be carried out by the Tenderer without any additional financial implications.

13 Testing

Various tests and thorough inspection shall be carried out during manufacturing of the lift components to ensure that they comply with the standard practice. The following tests shall be carried out after lift installation and before it is put into normal service.

The lift manufacturer shall provide the necessary test weights and instruments without any extra cost

1. Tests to determine the insulation resistance.
- 2 Tests to determine that earthing of all the conduit switch casings and similar metal work is continuous.
- 3 Tests to determine that the motor (including no load test), brake, control equipment and door locking devices function correctly.
- 4 Tests to determine that the lift car shall raise and lower at rated load.
- 5 Test to determine that the lift car shall attain rated speed.
- 6 Tests to determine that the safety gear shall stop the lift car with rated load.
- 7 The runway test shall be carried out with all electrical apparatus operative except for the over speed contact or cutout on the governor. For the lifts operating directly from alternating current, the governor shall be tripped by hand at the maximum speed obtainable.
- 8 Testing the ARD device operation on power failure & overload audio-visual warning indicator.
- 9 Operations of emergency brake device.
- 10 All safety features shall be tested.

14 POST INSTALLATION TESTS AT SITE

Post installation test at site shall be conducted by the lift contractor in the presence of PFCL / Consultant as per IS 14665 PART 3 and PART 5 and the below is not an inclusive list. Also the contractor will have

to perform tests to confirm the performance parameters in the presence of PFCL and its representatives post installation and commissioning.

The tools & tackles required for such tests will have to be brought in by the lift contractor. All test instruments shall be calibrated not more than one year prior to their use. The contractor may be asked to submit calibration certificates or other documents for proof of compliance.

14.1 Leveling Test

Accuracy of the floor leveling shall be tested with the lift empty, fully loaded.

The lift shall be run to each floor while travelling both in upward and downward directions and the actual distance of car floor above/ below landing floor shall be measured. In each case there shall not be any appreciable difference in these measurements for leveling at the floors when the car is empty and when it is fully loaded. The tolerances for leveling shall be as $\pm 5\text{mm}$ accuracy.

14.2 Safety Gear Test

Instantaneous safety gear controlled by a governor should be tested with contract load and contract speed, governor being operated by hand. Two tests should be made, however, with wedge clamps or flexible clamp safeties, one with contract load in the car and the other with 68 kg (equivalent to one person) in the car. The stopping distance obtained should be compared with specified figures and the guides, car platform, and safety gear should be carefully examined afterwards for signs of permanent distortion.

Counterweight safety gear should be tripped by the counterweight governor and the stopping distance noted. In this case, however the governor tripping speed should exceed that of the car safety governor but by not more than 10 percent.

During the safety gear test, car speed (from the governor or the main sheave) should be determined at the instant or tripping speed with that stated in I.S. The governor jaws and rope should be examined for any undue wear.

14.3 Contract Speed

This should be measured with contract load in the car, with half load with no load, and should not vary from the contract speed by more than 10 percent. The convenient method is by counting the number of revolutions, made by the sheave or drum in a known time. Chalk mark on the sheave or drum and a stop switch will facilitate timing but care must be exercised to ensure that no acceleration or retardation periods are included. If the roping is 2 to 1 the sheave speed is twice the car speed. Alternatively, the speed can be measured by a tachometer applied directly to shaft or a contact free tachometer immediately below the sheave.

14.4 Lift Balance

After the above test, some of the weight shall be removed until the remaining weights represent the figures specified by the bidder. With this condition car at half way travel the effort required to move the lift car in either direction with the help of winding wheel shall be as nearly as can be judge by the same.

14.5 Car and landing doors interlocks

The lift shall not move with any door open. The car door relay contact and the retiring release cam must be tested. The working of the door operation and the safety edges and light equipment if any provided shall also be examined.

14.6 Controllers

The operation of the contactors and interlocks shall be examined and it shall be ascertained whether all requirements laid down in the specifications have been met.

14.7 Normal Terminal Stopping Switches

This shall be tested by letting the car run to each terminal landing in turn, first with no load and then with contract load and by taking measurements, top and bottom over travels can be ascertained.

14.8 Final Terminal Stopping Switches

The normal terminal stopping switches shall be disconnected for this test. It shall be ensured that these switches operate before the buffers are engaged.

14.9 Insulation Resistance

This shall be measured (after removing the electronic PCB's and their connection) between power and control lines and earth and shall not be less than 5 mega-ohms when measured with D.C. voltage of 500 volts. Test certificates thus conducted in the controlled factory environment shall be submitted.

14.10 Earthing

All conduits, switches, casing and similar metal work shall have earthing continuity.

14.11 Ropes

The size, number construction and fastenings of the ropes should be carefully examined and recorded.

14.12 Buffers

The car should be run on to its buffers at contract speed and with contract load in the car to test whether there is any permanent distortion of the car or buffers. The counterweight buffers should be tested similarly.

15 Tools – (DELETED)

~~The Tenderer shall provide required branded tools for user department for ordinary maintenance work along with tool box.~~

~~Tool box shall contain normal plier, nose plier, 12" screw driver, continuity tester, required ring & fixed spanners, adjustable spanner, cable / wire stripper etc. each for each machine room.~~

16 STEEL MATERIALS

This specification comprises of supply, installation, testing and commissioning of steel material / structure / items required to provide for the lift, like sill support angles, fascia plates, hitch plates, M.S. Pit ladder, M.S. trap door cover with frame, supporting beams in the lift machine room, R.S. Joist / beam / channel, S.S. chequered plate platform and other allied work in the lift shaft and lift pit.

The structural steel framework in the lift shaft for supporting the lift machine shall be provided. If necessary, M.S. Grill partition for lift machinery for safety purpose shall be provided. Complete M.S. structure shall be tested for its mechanical stability.

The cost of all steel material required for lift installation shall be inclusive in the offer.

17 ARCHITRAVES / FACIAS ON EACH LANDING

Each landing shall be covered with architraves / fascias on all the floors to have aesthetically good appearance. Architraves / fascias shall be provided on all the floors in such manner that lift car gate clearance may not reduce and no disturbance will be caused for opening of car gate. The contractor shall provide Architraves / fascias for opening of car gate on all the floors. Top, Bottom and side wall of opening of car gate at each floor shall be covered with architraves / fascias and front side of opening of car gate at every floor shall be covered with architraves / fascias of 150 mm size by width and the cost is included in the SITC of Lifts. If any additional Architraves / fascias work is to be carried out as per the site requirement, the same will be paid as per the actual measurements and the rate quoted for the item in BOQ. The work shall be carried out as per SOR Activity R2-CS-FL-28-L.

18 TRAILING CABLE

Trailing cables exceeding 30 meters in length shall run so that the strain on individual cable conductors will be reduced to a minimum and the cables are free from contact with the car counterweight, shaft walls or other equipment. Trailing cables exceeding 30 meters in length shall have steel supporting fillers and shall be suspended directly by them without rubbing over other supports.

19 PROVISION FOR THE DISABLED AND HANDICAPPED

All the Passenger Lift shall be provided with following features:

- Lift control buttons at locations and height specified in IS 15330 - 2003
- Hall call buttons at locations and height specified in IS 15330 - 2003
- Hand rails shall be provided on the side walls of the Lift at height & locations specified in IS:15330 - 2003. An international symbol of access of the disabled shall be permanently and conspicuously displayed at each and every Lift landing next to the Lift entrance (to be provided by signage contractor). Braille notations indicating the floor levels shall be incorporated in each button or next to each button at the COP and hall call buttons.
- A digital voice system for announcing the car position, opening/closing of doors, direction of travel and messages shall be provided as per IS:15330 - 2003

- A laminated safety glass type mirror of at least half of the size shall be installed on rear panel at appropriate position as per IS: 15330 – 2003

MUNICIPAL CORPORATION OF GREATER MUMBAI

TECHNICAL DETAILS OF PASSENGER LIFT

Sub: Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai. with three years of defect liability period with all accessories as per technical specifications.

Sr.No	Description	Particulars
1	Approved Make	M/s. OTIS Elevator ,M/s.Kone Elevator, M/s.Schindler, , M/s.Johnson lift, M/s.Escon Elevator, M/s Eros Elevators ,M/s Thyssen Krupp Elevators/s. Eskay Eevators ,M/s. Trio Elevators,M/s. Omega Elevators
2	Type	Passenger cum stretcher Lift. (Hospital Lift)
3	Usage	168 Bedded building (Gr.+2 floors) at Kasturba Hospital
4	Type of drive	VVVF drive (as per Manufacturer Standard)
5	Load Capacity	1020 kg,
6	Passenger capacity	15 Persons.
7	Control system	Full Collective Control
8	Max. no. of stops	3 stops.
9	Travel	Gr.+ 2 floors.
10	Maximum rise	14.00 mtr.
11	Car Speed	1.0 mps
12	Power supply	3 Ph 440 V for Elevator operation and 1 Ph 230 V for Lighting Load.
13	Entrance	Front only (standard)
14	Door	Centre opening /Telescopic, automatic, power operated, inner portion of stainless steel with 900

		mm minimum opening.
15	Lift Car details	Stainless steel (304 Grade sheet of 1.5 mm thick) body with hair line finish with fire resistance capacity as per applicable Indian / International standards.
16	Landing gate details	Centre opening/ telescopic, automatic, power operated, inner portion of stainless steel with 900 mm minimum opening.
17	Lift pit depth	1560 MM
18	Lift shaft / Well size	2080 X 3252 MM
19	Existing Lift Car size	1100 mm (W) X 2400 mm(D) X 2200 height
20	Car Size	To be furnished by bidder (shall not be less than the existing Car size)
21	Roping	2:1
22	Annunciator	To be provided as per manufacturers / applicable standard.
23	Protection during power failure.	To be provided as per manufacturers / applicable standard
24	Protection against overload	The Lift shall not move if the car is overloaded. Necessary interlock arrangement should be provided in the control system.
25	No. of Lift.	1 No.
26	Car Finish	Car enclosures shall be Stainless Steel hairline finish or/and Stainless Steel Scratch Resistant finish
27	False Ceiling Type	False ceiling with pressure fan / blowers and LED Lights of at least 100 Lux illumination to be provided
28	False Ceiling Finish	Stainless Steel Hairline Finish
29	Hand Rails	Hand rails shall be provided on the side walls of the Lift at height & locations specified in IS:15330 - 2003.

		SS Hairline finishes Hand rails on rear side of the lifts. All Hand rails to be fixed at a height of 900 mm from the floor level.
30	Flooring	Granite / Stone flooring inside car of approved design and quality to be provided and installed by bidder.
31	Car Position Indicator	Multimedia Color LCD Display with Dynamic Car Direction & Digital position indicators to be provided in the car operating panel of all the lifts.
32	Fire Switch	One Fire man's switch per group of Lifts at Ground floor level.
33	Pit Flooded Switch	Stainless Steel adjustable float switch. Normally Open contact rating: 220VAC - 2.5A - 50W.3/8 throw to activate.
34	Emergency Alarm Button	Emergency Alarm button with Bell symbol & the same should be at a distinct distance from the call buttons.

ASSOCIATED CIVIL WORKS

The scope of civil work consists of following works:-

- i) Brick masonry wall works for & around landing doors, chipping of walls, door openings, fascia plates architraves, making holes in the walls / slab. Necessary civil work in all respect in lift shaft & lift pit required for foundation ~~with white glazed tiles on the wall and flooring, grouting etc,~~ complete with final finishing plaster, white wash. Making lift openings as per required size for landing doors.
- ii) Tenderer shall examine the maximum bending moment of the beam & structural stability of lift shaft / structure, Lift machine platform etc. and suggest the strengthening if required with detailed working.
- iii) A Firm, stable and sturdy scaffolding shall be erected in the hoist way for carrying out the lift work.
- iv) Barriers should be provided across all open entrances to avoid chance of accident.

The necessary civil work which is not included in the specifications but required for commencement of lift in all respect, should be carried out by the Tenderer without any additional financial implications.

NOTE:-

The details given above are tentative, bidder are requested to visit the site and collect actual details and quote as per actual requirement at site.

TECHNICAL SPECIFICATIONS FOR SITC OF LIFTS
APPLICABLE STANDARDS

Unless otherwise specified elsewhere in this specification, the rating Performance and testing of equipment and accessories shall conform to the latest revisions of standards listed below. Bidder can obtain copies of Indian Standards Specifications from Bureau of Indian Standards, Manek Bhavan, Bahadur Shah Zafar Marg, New Delhi-110002 on payment of applicable charges.

Standard	Title
IS:962:1989	Code of Practice for architectural and building drawings (second revision)
IS:4591:1968	Code of Practice for installation and maintenance of escalators.
IS:14665	Specification for electric traction lifts.
(Part 1):2000	Guidelines for out line dimensions of passenger, goods, service an hospital lifts.
(Part 2 / sec 1 & 2) : 2000	Code of Practice for installation, Operation and maintenance, section 1 passenger and goods lift, section 2 service lifts.
(part 3 / sec 1 & 2):2000	Safety roles, Section 1 passenger and goods lift, section 2 service lifts.
(part 4 / sec 1 & 9):2001	Components, Section 1 Lift buffers, Section 2 Lift guide rails and guide shoes, Section 3 Lift car frame, car, counterweight and suspension, Section 4 Lift safety rears and governors, Section 5 Lift retiring cam, Section 6 Lift doors and locking devices and contacts, Section 7 Lift machines and brakes, Section 8 Lift wire ropes, Section 9 Controller and operating devices.
(part 5):1999	Inspection Manual.
IS: 325	3 Phase Induction motor.
IS: 4064 (Part – II) 1978	Specific requirements for the direct switching of individual motors
IS: 4047	Switch fuse unit
IS: 9224 (Part-II)- 1979	HRC Cartridge Fuse links up to 650 volts.

IS: 1255	Cable laying
IS: 694 – 1977	PVC insulated electric cables for working voltage up to and including 1100 volts.
IS: 3043	Earthing
IS: 900	Installation of Motors & Starters
IS: 1231	Motor frame size
IS: 4064	Switches
Electricity Act 1910	Indian Electricity Rules
IS: 732(Part – III) – 1982	Code of practice for Electrical Wiring installations
Rule 41, 51, 54 & 61	Local fire insurance association code for insurance.
IS 2365/1977/ IS:2366/2002 IS:14665:1999-2000 Part I to Part-5	Suspension Rope.

PART - II

SPECIFICATIONS FOR COMPREHENSIVE ANNUAL SERVICING & MAINTENANCE CONTRACT FOR LIFTS AFTER COMPLETION OF 3 YEAR DEFECT LIABILITY PERIOD

PREAMBLE:

It will be sole responsibility of the contractor to keep the Lift in safe working condition at all the time as per relevant Standards, Rules and Regulations in force. The contractor should be holder of License from the Lift inspector and permission from the appropriate authorities to service and maintain adequate number of lifts.

1. The contractor shall use the services of trained, appropriately skilled personnel who shall be directly employed and appointed by the contractors. They shall be qualified and experienced to keep the entire Lift and its equipments in proper working condition. They will also take all reasonable care to maintain the equipments properly adjusted and they will take all reasonable care to maintain the Lifts in efficient, reliable, neat , tidy and safe operational condition so as to meet all the P.W..D.'s / Lift Inspectors requirements.
2. The contractors shall give service and maintenance program every month in advance. The contractor shall direct their said personnel as per scheduled program given and approved by user department to the above said Lifts once in a month during working hours to examine, lubricate and adjust the equipments of the Lifts in presence of either Municipal Engineer or concerned person of user department. They shall obtain from them, signature on the servicing/maintenance documents with Names, Designation etc.on the letter head of the contractors for each monthly servicing repair and maintenance and produce the same in every quarter along with bills.

The contractor shall check , adjust, clean and lubricate all the items mentioned below and enter into logbook duly signed, at least once a month.

- i. Abrasion in main Diverter sheaves.
- ii. Wear and Tear in Main Ropes.
- iii. Break setting and leveling.
- iv. Normal operations of all gates.
- v. Gate Lock inter- locking of all gates.
- vi. Guide shoes, gate lock ram checking.
- vii. Three phase safety tipping
- viii. Over speed governor checking
- ix. Buttons, Signal checking of all floors.
- x. Condition of cable wiring etc.
- xi. All contacts, circuits, relay should be checked for physical condition and their settings.
- xii. Condition of motor, driver and all major equipment with proper oiling and greasing of the same.

- xiii. Machine, thrust bearings, bushings worm shaft and wheel.
 - xiv. Lift motor, motor generator, motor windings, rotating element, commutator and bearings.
 - xv. Controller, P.C.B. Drives, transducer, resistors, condenser, power amplifier, transformers, Coils, contacts, leads, tinning device, dash pots etc.
 - xvi. Governor, Governor sheave, shaft assembly, bearings, contacts and Governor jaw.
 - xvii. Car and all landing gates, hoist way door, inter locks, door hangers, door contacts, and auto Doors safety shoes, deflector or secondary shoes.
 - xviii. Guide rails, car & counter-weight and their guide shoes, buffer springs.
 - xix. Break safety system, break contact lining and components.
 - xx. Clean the lift well properly.
 - xxi. Clean the cabin cage from inside and out side, the fan, the Lift pit etc. properly.
 - xxii. Car and hall buttons, position indicators, hall lanterns, direction indicators, landing signals fixtures, top and bottom safety switches etc.
 - xxiii. Examine the ropes and their attachments, safety devices, door locks, worms and gears, all moving parts etc. and functioning of over load indication devices.
3. If the Lift motor is found burnt during normal use, the same shall be replaced / repaired immediately at the cost of contractor. The contractor shall replace all the spare parts free of cost immediately for normal wear and tear whenever necessary. The yearly cost of the service and maintenance shall be inclusive of the above. In case the above becomes necessary due to reasons beyond the control of the contractors, Rewinding / Replacement charges will be borne by M.C.G.M. in which case the decision of Ch. Engineer (M&E) shall be final.
 4. The contractor shall arrange to direct the maintenance personnel to attend the Lifts immediately after receipt of break down call from the Municipal Engineer or authorised representative of the user department. The contractors shall give priority in their service, repair and manufacturing facilities to restore the equipments to normal service. In no case, the breakdown shall be kept unattended for more than two hours.
 5. The contractors shall attend to any number of breakdown calls between 6.00 A.M. to 10.00 P.M. on all days including Sundays and Holidays and in case of Emergency during night hours under unavoidable circumstance.
 6. The contractor shall arrange to repair the Lift installation expeditiously without causing any inconvenience to the user department, failing which the repairs shall be got done at risk and cost of the contractors. However, in case of any major breakdown the contractor shall consult the Engineer concerned to carry out the repairs, which shall be completed within a day.
- P.V.C. flooring shall be replaced once in two years. The selection of the Lifts for above works will be made by M.C.G.M. authorities.

7. The contractors shall inspect the Lift with Engineer concerned along with the Inspector of Lifts of P.W.D. and see that license is renewed with all compliance of P.W.D. requirement whenever called for.
8. The contractors shall have to carryout the work of repairs, maintenance and replacement of parts in good workmanship manner as per standard practice & Rules & Regulations of Lift Rules enforce.
9. The contractor shall maintain record of all the repair, servicing and maintenance works carried out and shall submit the necessary log- cards duly signed and stamped by Municipal Engineer or authorized person of user department to the office of Executive Engineer Mechanical (Electrical Installation) Maintenance at Municipal workshop at the end of each quarter.

The contractor will furnish the program of servicing and maintenance of Lifts for the whole year with date and timing etc. immediately on receipt of work order to the user department with a copy to Executive Engineer Mechanical (Electrical Installation) Maintenance at Municipal workshop within a week. Any changes in the above scheduled program shall be informed in Advance.

10. The contractors shall have to carry out any other work which is not included in the above terms and conditions under the instructions from Municipal Engineer of Executive Engineer Mechanical (Electrical Installation) Maintenance at Municipal workshop / Office with due approval of rates etc. for the satisfactory working of Lifts.
11. Before quoting the rates the Tenderer shall inspect the Lift installations. No extra claim whatsoever will be entertained later on during the contract period.
12. The contractor will replace all the parts (including indication lamps switches wire, cables, emergency lights batteries etc.) whenever found necessary due to normal wear and tear at their cost. Further, though the costs of replacement of the following items are not charged extra as the replacement of the same is covered under comprehensive maintenance contract for the normal working of Lifts with usual wear and tear, the contractor shall specifically quote the rates for the following which may become necessary in unusual circumstances:-
 - i)Replacement of Ropes
 - ii) Repairs to collapsible gates of car and landings.
 - iii) Car enclosure (removable panels) door panels, hung ceiling, light diffuser, handrails, frames, sills etc.
 - iv) Automatic Rescue Device.
 - v) Audio Video overload warning indicator.
 - vi) Infra-red Light Curtain.
 - vii) Repairs to cabin fans.
 - viii) Rewinding of motors.
 - ix) Any other items.

The above rates will be applicable when repairs and replacement becomes necessary due to accidents, leakage / seepage of water or such reasons which are beyond the control of contractor. The Engineer of contract will decide the responsibility in such cases whose decision will be final.

13. The complete safety of human Life and the machinery and other parts of the lifts while carrying out the service and maintenance of the Lift will be the responsibility of the contractor. Any damages caused to the municipal property will be recovered from the bills.
14. The contract is terminable by either party, giving one calendar month's Notice in writing to his intention to discontinue it.
15. In case of disputes Municipal Commissioner's decision will be final and binding to both parties.
16. The Tenderer/ Quotationer shall specifically state there past experience in maintaining such lifts and also furnish the detailed List of Lifts maintained by them.
17. Attend the complaints free of cost whenever called by Corporation.
18. Whenever found necessary, the Contractor shall replace the spares and other parts of all the equipment's integrated to the lift operation, safety and statutory requirement free of cost.
19. The contractor shall check the performance of the lift after servicing by noting various operating parameters such as temperature control, load, setting etc.
20. The contractor shall invariably clean the premises of lift car top, lift pit and lift shaft, after carrying out the servicing work.
21. The contractor shall submit a preventive maintenance schedule for each lift and get it approved from the user dept.
22. The contractor shall submit the copies of service reports (duly signed by the user dept.) to E.E. Mech.(E.I.) Maint. every month.
23. The contractor shall have setup to receive & attend the complaints 24 hours a day. The breakdown complaint shall be attended within 2 hours from intimation.
24. The contractor / firm has to arrange a technically qualified liasioning officer in respect of day to day servicing and maintenance of lifts, who will keep regular contact with central office of Ex. Engr. Mech.(EI) Maint. and attend to the defects informed to him immediately. He shall give feedback to MCGM after complying with the rectification / repairs.

The contractor shall arrange for annual inspection of lifts by the lift inspector, PWD Govt. of Maharashtra during guarantee period and CSMC period. The inspection charges for the same shall be borne by contractors.

PENALTY TERM

Every breakdown or preventive maintenance call shall be backed by inspection report by the contractor.

Failure to attend the call shall attract penalty of **Rs. 500/-** for 1st incidence, which shall be doubled for subsequent failure. The maximum penalty shall be Rs. 2000/-

Due to non-availability of spares if the lifts remain un repaired for more than a week, prorate service charges for the month shall be deducted from the quarterly bill.

TERMS OF PAYMENT= COMPREHENSIVE SERVICE MAINTENANCE CONTRACT

The **Quarterly** payment of the Contract price will be paid within 30 days from the date of satisfactory completion of service and submission of bill. This contract is terminable by MCGM if the services rendered are unsatisfactory.

In case of dispute the Municipal Commissioner's decision will be final and binding on both the parties.

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CONTAINTS

VARIOUS SCHEDULES

SCHEDULE – I	Tender Drawing & Publications
SCHEDULE – II	Deviation from Specifications
SCHEDULE – III	Details of SITC of Lifts Work carried out
SCHEDULE – IV	Details of Key persons: SITC of Lifts.
SCHEDULE – V	Technical Data sheet for Rem, S.I.T &C of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital,
SCHEDULE – VI	Eligibility Criteria Schedule
SCHEDULE – VII	Schedule of Completion Period

SCHEDULE – I

TENDER DRAWINGS AND PUBLICATIONS

The Tenderer shall furnish a list of drawings, publications, copies of type test certificate and other literature illustrating the equipments offered in his tender. The copy of each item listed shall be uploaded with the tender.

Title	Reference

Seal & Signature of Tenderer with Date

SCHEDULE – II

DEVIATION FROM SPECIFICATIONS

The Tenderer shall state briefly any deviation contained in his main offer from the specification.

If the deviations are listed in a covering letter then reference of the letter shall be made below.

Item or Clause	Deviation	Covering letter page

Seal & Signature of Tenderer with Date

SCHEDULE – III

DETAILS OF WORK CARRIED OUT:

The Tenderer shall furnish hereunder details of work of similar type and magnitude carried out by them in the last seven years and in progress.

Sr.N o.	Brief Description of Work	Name & Address of the Client	Value of Work	In the year

Seal & Signature of Tenderer with Date

SCHEDULE – IV

DETAILS OF KEY PERSONNEL (PROPOSED FOR THE **Work of Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.** TO BE FILLED IN SEPARATELY FOR EACH PERSONNEL

	Name	:	
	Designation	:	
	Qualification	:	
	Year of experience in similar type of work	:	

Seal & Signature of Tenderer with Date

SCHEDULE- V

TECHNICAL DATA SHEET

Subject: Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.			
Sr.	Items	:	1 no. of Passenger Lift with gear less machine (15 P-1020 Kgs capacity) at 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, 3 stopes.,1.0 mps speed.
1	Type and Make of Lift	:	
2	Capacity of Lift	:	
3	Lift Speed (MPS)	:	
4	Type of drive for Lift	:	
5	Hoist Motor Details		
a.	Type and Make	:	
b.	HP, RPM and operating Voltage	:	
c.	Insulation class	:	
d.	Duty (Starts per hour)	:	
6	Lift car size		
7	Car Door Finish & Opening	:	
8	Landing Door Finish & Opening	:	
9	Method of Operation	:	
10	Ropes :		
A	Main suspension Ropes		
i.	Size	:	
ii.	Construction	:	
iii.	No. of ropes	:	
iv.	Roping	:	
v.	Factor of safety	:	
B	Ropes for Governor	:	
i.	Size	:	
ii.	Construction	:	
iii.	No. ropes	:	
11	Annunciator		

12	Protection against power failure.		
13	Protection against overload		
14	Car Finish	a) Rear Panel:- b) Side Panel:- c)Front Panel:-	
15	False Ceiling Type		
16	False Ceiling Finish		
17	Ventilation		
18	Hand Rails		
19	Flooring		
20	Fire Rated Doors		
21	Car Position Indicator		
22	Fire Switch		
23	Pit Flooded Switch		

Seal & Signature of Tenderer with Date

LIST OF APPROVED MATERIAL

Unless otherwise mentioned specifically only the following approved make / brands of various electrical accessories will be used. In case, there are two types of product under one brand name, then product having I.S.I. mark shall be used. In case, the approved brands are not available in the market then, equivalent product, which shall be approved as per relevant standards, shall be used.

The contractors should distinctly understand that it would not be their prerogative to insist on using a particular make/brand amongst the approved ones.

The list is subject to revision from time to time, any change of brand name or change in company's name shall be 'deemed approved' from the date of such change.

Sr. No.		Item Description	Makes / Brand
1.		H.T. Switchgear.	Siemens, L&T, Kirloskar, Bhel, English Electric, ABB, Jyoti, Crompton Greaves, C&S
2.		L.T. Switchgear.	
	A)	Enclosed in sheet steel with H.R.C. fuses for 63 Amps., and above.	L&T, Siemens, Havell's, Jyoti, CPL, Schneider, KEW, Kalki, Standard, Indo Asian, Versatrip, HPL, C&S, BCH, Bentec
	B)	Cast iron with rewirable fuses.	Bosma, KEW, CPL, Kalki, Harisons, HPL, C&S, BCH, Bentec
	C)	Cast iron or enclosed in sheet steel changeover switch.	KEW, Bosma, CPL, Havell's, Indo Asian, Kalki, Harisons, HPL, Legrand, Anchor, Cona, C&S, Bentec
	D)	Circuit Breakers (Moulded case).	L&T, Siemens, Havell's, Indo Asian, Schnelder, MDS, ABB, Standard, HPL, Moeller HPL, Legrand, Anchor, Cona, BCH, Bentec
	E)	Miniature Circuit Breakers	MDS, Havell's, Guts, Standard, Versatrip, Indo Asian, Guts, Siemens, Leader, Moeller HPL, HPL, Legrand, Cona, C&S, KOLORS, Bentec
	F)	Cubical panel switchgear accessories.	
	I)	TPN / DP Switches / Isolators.	L&T, Siemens, KEW, Standard, CPL, Havell's, Indo Asian, Versatrip, HPL, Legrand, Anchor, Cona, C&S, BCH, Polycab.
	II)	Rotary CAM type, Selector switch.	Siemens, Thakoor, Kaycee, AEI, Standardgold, HPL, C&S
	III)	Start / Stop push button stations.	L&T, Siemens, Cutler-Hammer, Kaycee, Havell's, C&S, BCH.
	IV)	Contactors.	Schneider, Havell's, L&T, Siemens, Cutler-Hammer, ABB, HPL, C&S, BCH.
	V)	Indicating lamp (Neon Type)	Siemens, Vaishno or equivalent approved by relevant standards, BCH.
	VI)	Indicating lamp filament type with resistance.	National, Kamla, BCH, or equivalent approved by relevant standards.
	VII)	Earth leakage circuit breakers.	Datar, Standard, L&T, Havell's, English Electric, Indo Asian, Guts, Versatrip, 'Guts' Siemens, Leader, Moeller HPL, Cona, C&S, Bentec
	VIII)	H.R.C. Fuse.	Siemens, L&T, English Electric, Kaycee, Havell's, Indo Asian, Versatrip, Guts, Standard, KEW, HPL

3.		Power Transformer.	Essun, Kirloskar, Bhel, Bharat Bijlee, Emco, GEC, Voltamps, Crompton Greaves.
4.		Distribution Boards.	
	A)	With rewirable fuses.	Bosma, KEW, Stanley, CPL, Havell's, Indo Asian, Kalki, Standard, HPL, Legrand, Cona, BCH.
	B)	With HRC Fuse	English Electric, L&T, Siemens, Kew, Kaycee, Havell's, Indo Asian, Standard, HPL, Legrand, Cona, BCH.
	C)	With MCB's.	MDS, Standard, Indo Asian, Havell's, Versatrip, Guts, HPL, Legrand, Cona, BCH, Bentec, Polycab.
5.		Cables.	Finolex, Polycab. Tropodur, Gloster, Asian, Nicco, Universal, Incab, Havell's, Torrent, Vishal, HPL, KEI, Avocab, Bentec. Anchor, RR Kabel
6.		Socket / Lugs.	Dowells, Jainson, HPL or equivalent approved by relevant standards
7.		PVC Wires.	Finolex, Polycab, Gaztek, Nicco, Havell's, Torrent, RR Kabel, Anchor, Vishal, HPL, KEI, Avocab, Bentec
8.		Conduit.	
	A)	M.S.Black and G.I. Conduit.	BEC, Vimco, BI, EWC.
	B)	Rigid PVC conduit and accessories.	Precision, Asian, Diamond, BEC, Circle Arc, Swastik, Premium, Polycab, GM, PRESS FIT
9.		PVC casing-n-capping and accessories.	Presto-plast, Modi's, Sunplast, Precision, Diamond, Circle Ark, Alta, Super Plast, Shriplast, PRESS FIT
10.		Screws.	Nettle Fold, King Fold, Precision Fastners.
11.		Piano switches flush mounting (5 to 15 Amps.) / wall sockets & plugs (surface mounting), Modular Switches (5 to 15 Amp) holder pendant / batten / angle, three plate ceiling rose (for 3 core twisted flexible wire), 30 Amps. D.P. Ticcino type switch fuse with indicating lamp, bell push surface mounting, flush mounting.	Roma, Kalki, Strong, Leader, Cona, Modern 'ACE', Modern 'FAME', Modern 'Image', SSK, Harisons, Havell's, Safron, Vinay, Precious, Standard, 'elle' of M/s Aerolite, 'elleys' of Elle Elec. Pvt. Ltd., Anchor, Legrand, Cona, C&S, KOLORS, GM, Precision, PRESS FIT, Hi-Fi
12.		Wall socket and plugs metal clad (ray roll type).	GEC, AE, Havell's, Crompton Greaves, Indo Asian, Standard-Gold, SSK, Precision.
13.		PVC Board.	Sunwood, Presto-Plast or ISI marked.
14.		Special accessories concealed / Decorative (plate switches).	CPL, Roma, Anchor, Precision, IndoAsian, Harisons, Kalki, elleys, Vinay.
15.		Two/ Three core flexible wires.	Polycab, Pyroflex, Philco, Fixocab, Rajcab, Poliplast, Anchor, RR Kabel.

16.		Storage heater with thermostatic control.	Bajaj, Spherehot, Racold, Ketco, Crompton, Aqua Therm.
17.		Lamps.	
	A)	GLS Filament.	Bajaj, Crompton, Philips, GEC, Mysore, ECE, HMT, Surya, Cema, HPL.
	B)	Fluorescent, HPMV, HP/LP-SV, Halogen / MLL	Bajaj, Crompton, Philips, HMT, Anchor, ECE, Surya, Osram, Cema, HPL.
	C)	Halogen / MLL & metal halide.	GEC, Philips, Crompton, Bajaj.
	D)	CFL 8 to 24 Watts upto 36 watts, Groove type, pin type.	Bajaj, Crompton, Phillips, GEC, Mysore, Anchor, Wipro, Hykon, CEMA, Osram, GE, Halonix, HPL.
18.		Fitting for fluorescent HPMV lamps and LP / HPSV lamps with copper wound chokes and condensers. Bulkhead fittings, Duoflux / dispersive reflectors, flood light fittings. Recessed mounted CFL 36 Watt & Low Watt. Fittings which use energy saving light source like CFL, TL-5	Philips, Anchor, Crompton, Bajaj, Wipro, Surya, Havell's, Kalki, Altralite, HPL, Halonix
18A		LED light fixtures.	Intelux, Pyrotech, Lance, Orient, R R Electric, Vin
19.		Special fittings.	Philips, Bajaj, Crompton, Canara, Geminiglobal, Tulip, Kalki, Gaztek, HPL.
20.		Bell.	
	A)	Call bell / buzzer.	Bajaj, Kalki, Anchor, Harisons, Rider, Cona.
	B)	Gong bell / alarm bell.	Edison, Target, Modern, Kheraj, Harison, Leader.
21.		Exhaust fans / pedestal fans air circulators.	Crompton, Bajaj, Almonard, GEC-Alstom, Alfa, Ansu, Innova, Cinni, Adler.
22.	A)	Ceiling fans with double ball bearings.	Crompton (high breeze), Bajaj (Kassels 50 ISI), Bajaj(Excel), Polycab, Anchor
	B)	Table fans wall mounting fans / cabin fans.	Crompton, Usha, Ralli, Innova, Alpha, Cinni, Bajaj
23		Copper Ballast for fluorescent lamp	Philips, Crompton, Bajaj, Kalki, Gaztek, HPL.
24.	A)	Capacitor for motive power.	Epcos, Usha, Enco, Crompton-Greaves, Madhav, Khatau Junkar, RD, MSIL, Siemens, L&T, Shreem, Mahan, BCH.
	B)	Condenser for fluorescent (Repair work).	Epcos, Elconic, Priya, RD.
25.		D.G.Set.	
	A)	Engine.	Kirloskar, Ruston, Greaves-Cotton, Mahindra, Cooper Corp
	B)	Alternator.	Kirloskar, Stanford, NGEF, Crompton Greaves.
26.	A)	Submersible electrically driven water pump sets (Open Well)	Kirloskar, KSB, SU, Calama, Atlanta, Waterman, Laxmi, PEW, Darling, Agasti, C.R.I., Crompton Greaves, Perfect, Pluga, Shakti, Jasco,Lubi

	B)	4" & 6" Submersible electrically driven water pump sets (Bore Well)	Kirloskar, KSB, SU, Calama, Atlanta, Waterman, Laxmi, PEW, Darling, Agasti, C.R.I., Crompton Greaves, Perfect, Pluga, LADA, Shakti, Jasco, Lubi
	C)	D-watering pump sets	Kirloskar, KSB, SU, Calama, Atlanta, Waterman, Laxmi, PEW, Darling, Agasti, C.R.I., Crompton Greaves, Perfect., Lubi
27.		Diesel engine driven pump sets.	Kirloskar, Laxmi, Birla, Yamaha, Honda.
28.		Electrically driven pump set coupled type, mono block, self priming, jet pumps.	Kirloskar, Crompton, Jyoti, KSB, Mather & Platt, Bharat Bijlee, Voltas, Beacon, Laxmi, PEW, JMP, Batliboi, C.R.I., Agasti., Lubi
29.		Electric motors.	Kirloskar, Siemens, Bharat Bijlee, Crompton, Jyoti, Brown Boveri, Batliboi, GEC-Alstom, Laxmi, PEW.
30.		Air breaks starters for motors.	Siemens, L&T, Crompton Greaves, Cutler Hammer, BCH.
31.		Terminal block.	Elmex, Everest, Jyoti, Gaztek, Connectwell.
32.		Meters: Ammeter & Voltmeter (Analog).	Automatic Electric, Simpson Udey, Meco, Indian Meters, Kusum-Meco, HPL.
33.		Energy meters.	Automatic Electric, Meco, Indian Meters, Havell's, HPL, Bentec
34.		Water level control equipment.	S.B.Electricals, Su-Bhaskar, Minilec, Accent, AGMA22, RDS.
35.		Emergency lights.	Prolite, Profile, Rider, Tekno-Vision, Kheraj, BPL, Glolite.
36.		Plumbing accessories.	
37.	A)	G.I.Pipes.	Zenith, Tata, Jindal, Lloyd, Bhushan Steel, Siddharth, Ambika, Indian tube, Surya, Georg Fischer
	B)	G.I.Bends.	Tata, Goel, Bhushan Steel, Georg Fischer
	C)	C.I.Pipes.	ISI Approved Brand, Georg Fischer
	D)	(a) Gate valve (gun metal).	Leader, Sant, New, ORBINOX, Georg Fischer, OR any ISI Marked Valve.
		(b) NRVs (gun metal).	Leader, Sant, ORBINOX, Georg Fischer OR any ISI Marked Valve.
		(c) Spring loaded gun metal foot valve.	Swati, DRP, ORBINOX, Georg Fischer OR any ISI Marked Valve,
		(d) Pressure Guages	Guru, Georg Fischer or equivalent approved by relevant standards,
		Wafer type butterfly / check valves.	Crowly & Ray, L&K, Univas, Advance, ORBINOX.
38.		C.I.Pipe socket.	Indian Iron & Steel Company, Tisco, Georg Fischer
		C.I.NRVs.	Ujjain Pipe, Jamshedpur, Georg Fischer or equivalent approved by relevant standards,
		C.I. Foot valve.	Bhadravati, Kirloskar, IVC, Georg Fischer
		C.I.Sluice valve.	Swati, Mayur, Georg Fischer
39.		Spray painting of C / Fans OR any equipment.	Asian Paints 'Apolite' Brand, Nerolac, Berger.

40.		Highmast	Bajaj, Valmont, Skipper
41.		Bearings.	SKF, TATA, NBC.
42.		Electronic Ballast	Philips, Asian, Ecolumen, Kalki, Eata, HPL, Intelux
43		Fan's Electronic Regulator	Vinay, Anchor, Rider, Kalki, Cona, Bajaj, GM, Precision, PRESS FIT
44		Fluorescent Tube 28 W – T 5, (4Ft) or (3Ft) or (2Ft)	Philips, Asian, GE, OSRAM, HPL, Bajaj, Halonix
45		DWC HDPE – double wall corrugated pipes	REX, Gemini, Georg Fischer or equivalent approved by relevant standards,
46		Cable Trays and its accessories.	Asian Ancillary Corporation, Legrand, universal
47		Window Model Air Conditioner labeled by BEE.	Blue star , Voltas, Videocon, LG, Carrier, Godrej, Daikin, CYGNUS.
48		Split type Air Conditioner 2 star & above labeled by BEE.	Blue star, Voltas, Videocon, LG, Carrier, Godrej, Daikin.
50		Solar Street light	Hykon, Kwaliti, Halonix, Reliance, Jain Irrigation, Waree
51		Solar Water Heaters	Hykon, Kwaliti, Halonix, Neutech, Solar products co., Jain Irrigation
52		Recommended approved makes for items not covered under FME schedule Items'.	<p>i) 'Centrifugal & Screw Chillers' of M/s Kirloskar Chillers Pvt.Ltd.,</p> <p>ii) 'DMSGI' brand 'Terec+ Earthing Backfill compound and ESE Lightning Protection System' of M/s SGI Engineers Pvt. Ltd.</p> <p>iii) 'Meters, PLCs, Temperature Controllers, Timers, Counters, Process Indicators, Protection relays' of M/s Selec Controls Pvt.Ltd.</p> <p>iv) 'Programmable Logic Controller(PLC), power saving controllers, digital meters, Controller panel, Biometric System(BMS), Microprocessor based control system for Factory Automation & Process Control.' of M/s Softhard Automation Pvt.Ltd.</p> <p>v) 'UES' brand Earthing Electrodes & Earthing Systems of M/s Universal Earthing System Pvt. Ltd.</p> <p>vi) Metal GI plain / perforated ceiling panels and Aluminium plain / perforated ceiling panels of M/s Shringar Industries</p> <p>vii) Double skin & Single skin floor mounted ceiling suspended AHU, Ductable units, Heat recovery units, Ventilation Supply & Exhaust Air units, Pre(Factory) fabricated regular GI/Al/SS ductings, Pre insulated Ductings, Pre insulated Pipes, GI/Al Volume control Dampers, FCU of M/s Zeco</p>

			<p>Aircon Ltd.</p> <p>viii) Isolation Transformers, online insulation fault location system' of M/s Bender India Pvt.Ltd.</p> <p>ix) Air Handling Unit, Fan coil unit, Blowers, Cooling and Heating Coils, IR Ducts of M/s Moosa Haji Patrawala Pvt.Ltd.</p> <p>x) Waree' brand Solar Lantern, Solar Home Lightning system, Roof top solar power plant, water pumping system, Solar Garden lights of M/s Waree Energies Ltd.</p> <p>xi) Fire Alarm system by M/s Ravel Electronics Pvt. Ltd.</p>
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Schedule-VI
ELIGIBILITY CRITERIA SCHEDULE

Subject:- Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.

Tenderer must fill up the bellow given schedule.

Sr. No.	Post Qualification Criteria	Fulfilling the PQC Criteria Yes/No
	<p>Technical Capacity</p> <p>The Approved lift manufacture in their own name should have satisfactorily executed the work of similar nature MCGM /Semi Govt. /Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)</p> <p>Authorized firms of qualified lift manufacturers shall submit experience certificates of their own firm or of Approved lift manufacture authorized to them.</p> <p>a) Three similar completed works each of value not less than the value equal to Rs.5.40 Lakh</p> <p style="text-align: center;">OR</p> <p>b) Two similar completed works each of value not less than the value equal to Rs.6.76 Lakh.</p> <p style="text-align: center;">OR</p> <p>c) One similar completed work of value equal and or not less than the Rs.10.81 Lakh.</p> <p>The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.</p> <p>Similar work shall mean Removal, Supply, installation, Testing & Commissioning of Passenger gear less lift.</p>	

Seal & Signature of Tenderer with Date

CHEDULE- VII
SCHEDULE OF COMPLETION PERIOD

Subject: Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons- 1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.

Sr. No.	Municipal Requirement	As offered by the Tenderer
1	Total Contract Period: 5 Months (from the date of receipt of PWD work permission and Site clearance). The specifications and drawings shall be submitted within 30 days from the date of receipt of LOA. Failing which Rs. 2000/- per day as a penalty will be implemented	
2	Defect Liability Period 3 years after date of commissioning	
3	C.S.M.C. Period- 2 years immediate after completion of 3 years defect liability period.	

Seal & Signature of Tenderer with Date

SECTION 11
FRAUD
AND
CORRUPT
PRACTICES

FRAUD AND CORRUPT PRACTICES

- The Applicants and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority may reject an Application without being liable in any manner whatsoever to the Applicant if it determines that the Applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process.
- Without prejudice to the rights of the Authority under relevant Clause hereinabove, if an Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, such Applicant shall not be eligible to participate in any tender or RFQ issued by the Authority during a period of 2 (two) years from the date such Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.
- For the purposes of this Clause , the following terms shall have the meaning hereinafter respectively assigned to them:

A. “corrupt practice” means

the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to, or employing, or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOA or has dealt with matters concerning the Concession Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or save and except as permitted under the relevant sub clause, engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Concession Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Concession Agreement, who at any time has been or is a legal, financial or technical adviser of the Authority in relation to any matter concerning the Project;

B. “fraudulent practice” means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process ;

- C. “coercive practice”** means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons participation or action in the Bidding Process;
- D. “undesirable practice”** means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- E. “Restrictive practice”** means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Bidding Process.
- F.** If the Employer/Financier determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days’ notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of relevant Clause shall apply as if such expulsion had been made.
- G.** Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with relevant Clause.

For the purposes of this Sub-Clause:

- i. “corrupt practice” is the offering, giving, receiving to soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes Financier staff and employees of other organizations taking or reviewing procurement decisions.
- iii. “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- iv. “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- v. “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- vi. “obstructive practice” is deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede the Financier investigation into allegations of a corrupt, fraudulent, coercive or

collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

- vii. acts intended to materially impede the exercise of the Financer's inspection and audit rights provided .
- viii. "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.
- ix. "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, noncompetitive levels.
- x. A "party" refers to a participant in the procurement process or contract execution.

SECTION 12
PRE BID MEETING

PREBID MEETING

~~Pre bid meeting of the interested parties shall be convened at the designated date, time and place. A maximum of three representatives of each Applicant shall be allowed to participate on production of authority letter from the Applicant.~~

~~During the course of Pre bid meeting, the Applicants will be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall Endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.~~

~~Prospective bidders are suggested to study the Technical Specification and Scope of Work mentioned in the tender document and also visit the site. Submit the queries if any on e-mail ID: aerefeconst.me@megm.gov.in three days prior to the Pre bid meeting. Queries raised in written only be entertained and discussed.~~

SECTION –13
LIST OF APPROVED BANKS

LIST OF APPROVED BANKS

1. The following Banks with their branches in Greater Mumbai and in suburbs and extended suburbs up to Virar and Kalyan have been approved only for the purpose of accepting Banker's guarantee from 1997-98 onwards until further instructions.
2. The Bankers Guarantee issued by branches of approved Banks beyond Kalyan and Virar can be accepted only if the said Banker's Guarantee is countersigned by the Manager of a branch of the same Bank, within the Mumbai Limit categorically endorsing thereon that said bankers Guarantee is binding on the endorsing Branch of the bank within Mumbai limits and is liable to be on forced against the said branch of the Bank in case of default by the contractor/supplier furnishing the bankers Guarantee.

List of approved Banks:-

A	S.B.I and its subsidiary Banks
1	State Bank Of India.
2	State Bank Of Hyderabad.
3	State Bank Of Mysore.
4	State Bank Of Patiyala.
5	State Bank Of Saurashtra.
6	State Bank Of Travankore.
B	Nationalized Banks
7	Allahabad Bank.
8	Andhra Bank.
9	Bank Of Baroda.
10	Bank Of India.
11	Bank Of Maharashtra.
12	Central Bank Of India.
13	Dena Bank.
14	Indian Bank.
15	Indian Overseas Bank.
16	Oriental Bank Of Commerce.
17	Punjab National Bank.
18	Punjab & Sindh Bank.
19	Syndicate Bank.
20	Union Bank Of India.
21	United Bank Of India.
22	UCO Bank.
23	Vijaya Bank.
24	Corporation Bank.
	Scheduled Commercial Banks
25	Bank Of Madura Ltd.
26	Bank Of Rajasthan Ltd.
27	Banaras State Bank Ltd.
28	Bharat Overseas Bank Ltd
29	Catholic Syrian Bank Ltd.
30	City Union Bank Ltd.
31	Development Credit Bank.
32	Dhanalakshmi Bank Ltd.
33	Federal Bank Ltd.
34	Indsind Bank Ltd.
35	I.C.I.C.I Banking Corporation Ltd.

36	Global Trust Bank Ltd.
37	Jammu & Kashmir Bank Ltd.
38	Karnataka Bank Ltd.
39	KarurVysya Bank Ltd.
40	Laxmi Vilas Bank Ltd.
41	Nedugundi Bank Ltd.
42	Ratnakar Bank Ltd.
43	Sangli Bank Ltd.
44	South Indian Bank Ltd.
45	S.B.I Corporation &Int Bank Ltd.
46	Tamilnadu Mercantile Bank Ltd.
47	United Western Bank Ltd.
48	Vysya Bank Ltd.
D	Schedule Urban Co-op Banks
49	Abhyudaya Co-op Bank Ltd.
50	Bassein Catholic Co-op Bank Ltd.
51	Bharat Co-op Bank Ltd.
52	Bombay Mercantile Co-op Bank Ltd.
53	Cosmos Co-op Bank Ltd.
54	Greater Mumbai Co-op Bank Ltd.
55	JanataSahakari Bank Ltd.
56	Mumbai District Central Co-op Bank Ltd.
57	Maharashtra State Co-op Bank Ltd.
58	New India Co-op Bank Ltd.
59	North Canara G.S.B. Co-op Bank Ltd.
60	Rupee Co-op Bank Ltd.
61	Sangli Urban Co-op Bank Ltd.
62	Saraswat Co-op Bank Ltd.
63	ShamraoVithal Co-op Bank Ltd.
64	Mahanagar Co-op Bank Ltd.
65	Citizen Bank Ltd.
66	Yes Bank Ltd.
E	Foreign Banks
67	ABM AMRO (N.Y.) Bank.
68	American Express Bank Ltd.
69	ANZ Grindlays Bank Ltd.
70	Bank Of America N.T. & S.A.
71	Bank Of Tokyo Ltd.
72	Bankindosuez.
73	BanqueNationale de Paris.
74	Barclays bank.
75	City Bank N.A.
76	Hongkong & Shanghai banking Corporation.
77	Mitsui Taiyokbe Bank Ltd.
78	Standard Chartered Bank.
79	Cho Hung Bank.

SECTION –14

APPENDIX

FORM OF TENDER

To,

The Municipal Commissioner for Greater Mumbai

Sir,

I/ We have read and examined the following documents relating to the construction of

- i. Notice inviting tender.
- ii. Directions to tenderers (General and special)
- iii. General condition of contract for Civil Works of the Municipal Corporation of Greater Mumbai as amended up to date.
- iv. Relevant drawings
- v. Specifications.
- vi. Special directions
- vii. Annexure A and B.
- viii. Bill of Quantities and Rates.

1A. I/We _____

(full name in capital letters, starting with surname), the Proprietor/ Managing Partner/ Managing Director/ Holder of the Business, for the establishment / firm / registered company, named herein below, do hereby offer to

.....
.....

Referred to in the specifications and schedule to the accompanying form of contract of the rates entered in the schedule of rates sent herewith and signed by me/ us” (strike out the portions which are not applicable).

- 1B. I/We do here by state and declare that I/We, whose names are given herein below in details with the addresses, have not filled in this tender under any other name or under the name of any other establishment /firm or otherwise, nor are we in any way related or concerned with the establishment /firm or any other person, who have filled in the tender for the aforesaid work.”
2. I/We hereby tender for the execution of the works referred to in the aforesaid documents, upon the terms and conditions, contained or referred to therein and in accordance with the specifications designs, drawings and other relevant details in all respects.

* At the rates entered in the aforesaid Bill of Quantities and Rates.
3. According to your requirements for payment of Earnest Money amounting to **Rs.27,100/- (Rs.Twenty seven thousand one hundred only)**

I/We have deposited the amount through online payment gateways with the C.E. of the Corporation not to bear interest

4. I/We hereby request you not to enter into a contract with any other person/s for the execution of the works until notice of non/acceptance of this tender has first been communicated to me/us, and in consideration of yours agreeing to refrain from so doing I/we agree not to withdraw the offer constituted by this tender before the date of communication to me/us of such notice of on / acceptance, which date shall be not later than ten days from the date of the decision of the Standing Committee or Education Committee of the Corporation, as maybe required under the Mumbai Municipal Corporation Act, not to accept this tender.(Subject to condition 5 below).
5. I/We also agree to keep this tender open for acceptance for a period of **180 days** from the date fixed for opening the same and not to make any modifications in its terms and conditions which are not acceptable to the Corporation.
6. I/We agree that the Corporation shall, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely, if.
 - a. I/We fail to keep the tender open as aforesaid.
 - b. I/We fail to execute the formal contract or make the contract deposit when called upon to do so.
 - c. I/we do not commence the work on or before the date specified by the Engineer in his work order.
7. I/We hereby further agree to pay all the charges of whatsoever nature in connection with the preparation, stamping and execution of the said contract.
8. I/We further agree that, I/we shall register ourselves as 'Employer' with the Bombay Iron and Steel Labour Board' and fulfill all the obligatory provisions of Maharashtra Mathadi, Hamal and other Manual workers (Regulation of Employment and Welfare) Act 1969 and the Bombay Iron and Steel unprotected workers Scheme 1970.
9. "I/We..... have failed in the accompanying tender with full knowledge of liabilities and, therefore, we will not raise any objection or dispute in any manner relating to any action, including forfeiture of deposit and blacklisting, for giving any information, which is found to be incorrect and against the instructions and directions given in this tender.
10. "I/We further agree and undertake that in the event it is revealed subsequently after the allotment of work/contract to me/us, that any information given by me/us in this tender is false or incorrect, I/We shall compensate the Municipal Corporation of Greater Mumbai for any such losses or inconvenience caused to the Corporation in any manner and will not resist any

claim for such compensation on any ground whatsoever. I/we agree and undertake that I/we shall not claim in such case any amount by way of damages or compensation for cancellation of the contract given to me/us or any work assigned to me/us or is with-drawn by the Corporation,”

Address

Yours faithfully,

.....

Digital Signature of the Tenderer or the Firm

1.....

2.....

3.

Full Name and private residential address of all the partners constituting the Firm

A/c No.

.....

.....

Name of Bank

.....

.....

.....

Name of Branch

.....

.....

.....

Vender No.

.....

....

AGREEMENT FORM

Tender / Quotation dated 20...

Standing Committee/Education Committee Resolution No.

CONTRACT FOR THE WORKS
.....
.....

This agreement made this day of

Two thousand

Between
..... ..

inhabitants of Mumbai, carrying on business at..... ..
..... ..

in Bombay under the style and name of Messrs
..... ..

(Hereinafter called “the contractor of the one part and Shri

..... ..

..... ..

the Director(E.S.&P.) (hereinafter called “the commissioner” in which expression are included unless the inclusion is inconsistent with the context, or meaning thereof, his successor or successors for the time being holding the office of Director (E,S.& P)of the second part and the Municipal Corporation of Greater Mumbai (hereinafter called “the Corporation”) of the third part, WHEREAS the contractor has tendered for the construction, completion and maintenance of the works described above and his tender has been accepted by the Commissioner (with the approval of the Standing Committee/Education Committee of the Corporation NOW THIS

THIS AGREEMENT WITNESSETH as follows:-

- 1) In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract for works hereinafter referred to:-
- 2) The following documents shall be deemed to form and be read and constructed as a part of this agreement viz.
 - a) The letter of Acceptance
 - b) The Bid:
 - c) Addendum to Bid; if any
 - d) Tender Document
 - e) The Bill of Quantities:
 - f) The Specification:
 - g) Detailed Engineering Drawings
 - h) Standard General Conditions of Contracts (GCC)
 - i) All correspondence documents between bidder and MCGM
- 3) In consideration of the payments to be made by the Commissioner to the contractor as hereinafter mentioned the contractor hereby covenants with the Commissioner to construct, complete and maintain the works in conformity in all respects with the provision of the contract.

- 4) The Commissioner hereby covenants to pay to the Contractor in consideration of the construction, completion and maintenance of the works the contract sum, at times and in the manner prescribed by the contract.

IN WITNESS WHERE OF the parties hereto have caused their respective common seals to be herein to affixed (or have hereunto set their respective hands and seals) the day and year above written.

Signed, Sealed and delivered by the contractors

In the presence of

Trading under the name and style of

Full Name

Address

Contractors

Signed by the Director (ES&P) in the presence of

Ex. City/ WS/ ES

Director (ES&P)

The Common seal of the Municipal Corporation of Greater Mumbai was hereunto affixed on the 20 in the presence of two members of the Standing Committee.

- 1.
- 2.

- 1.
- 2.

And in the presence of the Municipal Secretary

Municipal Secretary

ANNEXURE " A "

1. **Name of work:** Removal, Supply, Installation, Testing, and Commissioning of 1 No. of passenger cum stretcher Lift (Hospital Lift) with Gearless machine (15 persons-1020 kg capacity) for 168 Bedded building (Gr.+2 floors) at Kasturba Hospital, Mumbai.

The Engineer for this work:

Chief Engineer (M&E)

Dy. Ch. Eng.(M&E) P&C

Ex.Eng. Mech.(E.I.) Construction.

2. **Estimated cost of Tender:**

Sr. No	Description of work	Total Amount Rs.
1	Civil Work	--
2	Electrical Work	--
3	Total Amount	--

3.

Earnest Money:	Rs. 27,100/-
----------------	--------------

4

Time Period

1.	Contract as a whole Period completion	5 Months
2.	Part or Groups of items	
i)		i)
ii)		ii)
iii		iii

1. In case of item rate contracts the actual cost calculated for the work executed at the rates mentioned in the contract schedule for different items including cost of excess and extra items of the work excluding the cost of water charges and sewerage charges if any, payable by the contractor and excluding cost on account of price variation claims as provided in extra excess conditions as amended up to date.

Annexure- B

PRE-CONTRACT INTEGRITY PACT

The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:-

1. The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MCGM, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
2. The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MCGM or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.
3. The Bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
4. The Bidder will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
5. The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the MCGM or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
6. The Bidder shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the MCGM as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder also undertakes to exercise due and adequate care lest any such information is divulged.

7. The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
8. The Bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
9. The Bidder and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority may reject an Application without being liable in any manner whatsoever to the Applicant if it determines that the Applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process

For the purposes of this Clause 9, the following terms shall have the meaning herein after respectively assigned to them:

1. “fraudulent practice” means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process ;
2. “coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons participation or action in the Bidding Process;
3. “undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
4. “restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

Signature of Tenderer/Bidder

Annexure- C

(On Rs. 500/- Stamp Paper)

DECLARATION CUM INDEMNITY BOND

I, _____ of _____, do hereby declared and undertake as under.

1. I declare that I have submitted certificates as required to Executive engineer (Monitoring) at the time of registration of my firm/company _____ and there is no change in the contents of the certificates that are submitted at the time of registration.
2. I declare that I _____ in capacity as Manager/Director/Partners/Proprietors of _____ has not been charged with any prohibitory and /or penal action such as banning(for specific time or permanent)/de-registration or any other action under the law by any Government and/or Semi Government and/or Government undertaking.
3. I declare that I have perused and examined the tender document including addendum, condition of contract, specifications, drawings, bill of quantity etc. forming part of tender and accordingly, I submit my offer to execute the work as per tender documents at the rates quoted by me in capacity as _____ of _____.
4. I further declare that if I am allotted the work and I failed to carry out the allotted work in accordance with the terms and conditions and within the time prescribed and specified, MCGM is entitled to carry out the work allotted to me by any other means at my risk and cost, at any stage of the contract.
5. I also declare that I will not claim any charge/damages/compensation for non availability of site for the contract work at any time.
6. I declare that I will positively make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge

Signature of Tenderer/Bidder

BANKERS GURANTEE IN LIEU OF CONTRACT DEPOSIT

THIS INDENTURE made this _____ day of _____ BETWEEN

THE _____ BANK incorporated under the English/Indian Companies Acts and carrying on business in Mumbai (hereinafter referred to as 'the bank' which expression shall be deemed to include its successors and assigns) of the first part

_____ inhabitants carrying on business at _____ in Mumbai under the style and name of Messer's _____ (hereinafter referred to as 'the consultant') of the second part Shri. _____

THE MUNICIPAL COMMISSIONER FOR GREATER MUMBAI (hereinafter referred to as 'the commissioner' which expression shall be deemed, also to include his successor or successors for the time being in the said office of Municipal Commissioner) of the third part and THE MUNICIPAL CORPORATION OF GREATER MUMBAI (hereinafter referred to as 'the Corporation') of the fourth part WHEREAS the consultants have submitted to the Commissioner tender for the execution of the work of " _____ and the terms of such tender /contract require that the consultants shall deposit with the Commissioner as/contract deposit/ earnest money and /or the security a sum of Rs. _____ (Rupees _____) AND WHEREAS if and when any such tender is accepted by the Commissioner, the contract to be entered into in furtherance thereof by the consultants will provide that such deposit shall remain with and be appropriated by the Commissioner towards the Security -deposit to be taken under the contract and be redeemable by the consultants, if they shall duly and faithfully carry out the terms and provisions of such contract and shall duly satisfy all claims properly chargeable against them there under AND WHEREAS the consultants are constituents of the Bank and in order to facilitate the keeping of the accounts of the consultants, the Bank with the consent and concurrence of the consultants has requested the Commissioner to accept the undertaking of the Bank hereinafter contained, in place of the contractors depositing with the Commissioner the said sum as earnest money and /or security as aforesaid AND WHEREAS accordingly the Commissioner has agreed to accept such undertaking NOW THIS AGREEMENT WITNESSES that in consideration of the premises, the Bank at the request of the consultants (hereby testified) UNDERTAKES WITH the commissioner to pay to the commissioner upon demand in writing , whenever required by him , from time to time , so to do , a sum not exceeding in the whole Rs. _____ (Rupees _____) under the terms of the said tender and /or the contract .The B.G. Is valid up to _____ "Notwithstanding anything what has been stated above, our liability under the above guarantee is restricted to Rs. _____ only and guarantee shall remain in force up to _____ unless the demand or claim under this guarantee is made on us in writing on or before _____ all your right under the

above guarantee shall be forfeited and we shall be released from all liabilities under the guarantee thereafter”

IN WITNESS WHERE OF

WITNESS (1) _____

Name and _____

Address _____

WITNESS (2) _____

Name and _____ the duly constituted Attorney Manager

Address _____

the Bank and the said Messer’s _____

_____ (Name of the Bank)

WITNESS(1) _____

Name and _____

address _____

WITNESS(2) _____

Name and _____

For Messer’s _____

address _____

have here into set their respective hands the day and year first above written.

The amount shall be inserted by the Guarantor, representing the Contract Deposit in Indian Rupees.

PROFORMAS:

PROFORMA- III

At least similar work, as stated in para 'A' of Post qualification,.

PROFORMA- III							
Name of the Project	Name of the Employer	Cost of the Project	Date of is-sue of work Order	Stipulated Date of Completion	Actual Date of Completion	Actual cost of work done	Remarks explaining reasons for delay, if any
1	2	3	4	5	6	7	8

Note: Scanned Attested copies of completion/performance certificates from the Engineer-in-charge for each work should be annexed in support of information furnished in the above Proforma.

PERSONNEL:

PROFORMA- IV					
Sr. No.	Post	Name	Qualification	Work Experience	
		(Prime Candidate/ Alternate)		No. of Years	Name of Projects
1					
2					
3					
4					

NOTE: Scanned Attested copies of qualification certificates and details of work experience shall be uploaded.

Check List :-

Documents to be uploaded in Packet 'A' –

1. Valid Registration Certificate
2. Valid Bank Solvency Certificate
3. GST Certificate
4. 'PAN' documents
5. Latest Partnership Deed
6. Signed copy of minutes of Pre-bid meeting and addendum / corrigendum
7. Form of tender duly filled & signed
8. Appendix - I duly filled and signed
9. Contact Details of responsible person (Office Address, email, Phone No. etc.)
10. Signed and stamped Check List

Documents to be uploaded in Packet 'B' –

1. Eligibility Criteria- As per PQC
2. Similar works in PROFORMA - III format
3. Litigation History
4. Notarized Undertaking of Rs. 500/- stamp paper as per Annexure- A (Irrevocable Undertaking)
5. Notarized Undertaking of Rs. 500/- stamp paper as per Annexure- B (Pre-Contract Integrity Pact)
6. Notarized Undertaking of Rs. 500/- stamp paper as per Annexure- C (Declaration cum Indemnity Bond)
7. E.S.I.C.
8. E.P.F.
9. Signed copies of General conditions of Contract (GCC) & Standard Bid Document (SBD)
10. Technical Specifications (Data Sheet) and deviation sheet
11. Bidder has to submit the **schedule of Maintenance** in their own format along with Packet 'B'

Seal and Signature of the contractor

INTERNAL GRIEVANCE REDRESSAL MECHANISM

M.C.G.M. has formed a Internal Grievance Redressal Mechanism for redressal of bidder's grievances. Any Bidder or prospective Bidder aggrieved by any decision, action or omission of the procuring entity being contrary to the provisions of the tender or any rules or guidelines issued therein, in Packet 'A', 'B' & 'C' can make an application for review of decision of responsiveness in Packet 'A', 'B' & 'C' within a period of 7 days or any such other period, as may be specified in the Bid document.

While making such an application to procuring entity for review, aggrieved bidders or prospective bidders shall clearly specify the ground or grounds in respect of which he feels aggrieved. Provided that after declaration of a bidder as a successful in Packet 'A' (General Requirements), an application for review may be filed only by a bidder who has participated in procurement proceedings and after declaration of successful bidder in Packet 'B' (Technical Bid), an application for review may be filed only by successful bidders of Packet 'A'. Provided further that, an application for review of the financial bid can be submitted, by the bidder whose technical bid is found to be acceptable / responsive.

Upon receipt of such application for review, M.C.G.M. may decide whether the bid process is required to be suspended pending disposal of such review. The M.C.G.M. after examining the application and the documents available to him, give such reliefs, as may be considered appropriate and communicate its decision to the Applicant and if required to other bidders or prospective bidders, as the case may be.

M.C.G.M. shall deal and dispose off such application as expeditiously as possible and in any case within 10 days from the date of receipt of such application or such other period as may be specified in pre-qualification document, bidder registration document or bid documents, as the case may be.

Where M.C.G.M. fails to dispose off the application within the specified period or if the bidder or prospective bidder feels aggrieved by the decision of the procuring entity, such bidder or prospective bidder may file an application for redressal before the 'Internal Procurement Redressal Committee' within 7 days of the expiry of the allowed time or of the date of receipt of the decision, as the case may be. Every such application for internal redressal before Redressal Committee shall be accompanied by fee of Rs.25,000/- and fee shall be paid in the form of D.D. in favour of M.C.G.M.

1st Appeal by the bidder against the decision of C.E./HoD/Dean can be made to concerned D.M.C./Director who should decide appeal in 7 days.

If not satisfied, 2nd Appeal by the bidder can be made to concerned A.M.C for decision.

Grievance Redressal Committee. (GRC) is headed by concerned D.M.C / Director, of particular department for the first appeal / grievances by the bidder against the decision for responsiveness / non-responsiveness in Packet 'A', Packet 'B' or Packet 'C', and if not satisfied,

concerned A.M.C. will take decision as per second appeal made by the bidder.

This Grievance Redressal Committee (GRC) will be operated through DMC(CPD) office where appeals of aggrieved bidder will be received with fee of Rs. 25,000/- from aggrieved bidder. The necessary correspondence in respect of said applications to the aggrieved bidder & concerned department, issuing notices, arranging of Grievance Redressal Committee (GRC) with D.M.C. and further proceeding will be carried out through registrar appointed by MCGM.

No application shall be maintainable before the redressal Committee in regard of any decision of the M.C.G.M. relating to following issues:

Determination of need of procurement

The decision of whether or not to enter into negotiations.

Cancellation of a procurement process for certain reasons.

On receipt of recommendation of the Committee, it will be communicated his decision thereon to the Applicant within 10 days or such further time not exceeding 20 days, as may be considered necessary from the date of receipt of the recommendation and in case of non-acceptance of any recommendation, the reason of such non-acceptance shall also be mentioned in such communication.

Additional Municipal Commissioner and/or Grievance Redressal Committee, if found, come to the conclusion that any such complaint or review is of vexatious, frivolous or malicious nature and submitted with the intention of delaying or defeating any procurement or causing loss to the procuring entity or any other bidder, then such complainant shall be punished with fine, which may extend to Five Lakhs rupees or two percent of the value of the procurement, whichever is higher.

Sr.No.	Existing tender condition	The amended conditions are applicable for lift manufacturers make mentioned in the technical specifications, those who are directly participating in the bidding process.
1	Irrevocable undertaking on MCGM prescribed format.	Deleted
2	Contract deposit The successful tenderer shall pay an amount equal to two percent of the contract sum (SITC+CSMC) within 30 days from the date of issue of letter of acceptance. The contract deposit shall be valid upto the end of DLP against the said work. (Subclause of Security Deposit of SBD)	i) Separate Bank guarantee of 2% of project cost for SITC of Elevator works shall be provided at the time of completion of work ii) Separate Bank guarantee of 2% of project cost for CSMC work which will be provided at the time of start of CSMC work of elevator iii) Separate 2% security deposit for individual elevator is also allowed. Similarly the BG valid up to end of DLP of individual elevator on Prorata basis is also allowed.
3	Submission of bill In light of circular issued by C.A. Under No. CA/F/P/24 dt. 10.10.2017. The contractor should submit C.A.'s certificate within six months from the date of issue of P.O., otherwise 5% amount from the bill will be kept in deposit account till the submission of C.A. certificate. (Circular No. C.A./F/Project/24 dtd. 10.10.2017 regarding GST)	Not applicable
4	Date of start of work:- Date of acceptance of LOI. (Clause of Time period of the project of SBD)	Date of start of work shall be on receipt of PWD work permission and handing over of Lift shaft.
5	Penalty:-As per tender conditions, contractor will be penalised for delay in completion of work, except due to Force Majure ,Bad wheather, civil commotion etc. or any other cause which is beyond the contractor's control. as per G.C.C., which includes obtaining i)necessary work permission from PWD ii) Lift operating License from PWD (Time Extension clause of SBD and GCC)	No change. However, time extension will also be applicable for a)Delay in submission of necessary PWD documents to obtain work permission b)Delay in milestone payment c)Any other delay by MCGM which is beyond the scope and control of contractor.
6	Contractor's Risks :-	No change.

	<p>All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.</p> <p>(Contractors risks clause of SBD)</p>	<p>However maximum risk /liability shall be to the extent of 100% contract value of concern project & it shall cease in case the work is terminated or completed by third party.</p>
7	<p>Termination :-</p> <p>The contract may be terminated by MCGM for convenience</p> <p>(Termination clause of SBD)</p>	<p>No change.</p> <p>However MCGM will give a prior written 30 days notice</p>
8	<p>Advance Payment:-</p> <p>The Corporation will make advance payment to the contractor for the works in two installments.</p> <p>First installment shall be equal to 5% of contract price against Bank guarantee for an amount equal to 7% of the contract price.</p> <p>The payment of second installment of advance up to 5% of contract price which will be due after 28 days from the completion of preliminary works, will be made to the contractor against 7% of Bank Guarantee of contract price.</p> <p>The above advance shall bear simple interest at 12% per annum.</p> <p>(Advance payment clause of GCC)</p>	<p>No change.</p> <p>However separate advance bank guarantee for individual elevator on pro rata basis is acceptable.</p>

Other terms and conditions remain unchanged. The above amended conditions are applicable only for the manufacturers directly participating in the bidding process.

In case of conflicting conditions stipulated elsewhere in SBD, the conditions stipulated above (1 to 8) in “ Special conditions” shall prevail.

MANUFACTURER'S AUTHORIZATION CERTIFICATE

(On Rs. 500/- Stamp Paper)

To,

The Chief Engineer (Mech. & Elect.)

M.C.G.M. Engineering Hub Building,

1st floor, Dr.E.Moese Road,

Worli Naka,

Worli, Mumbai 400 018.

I/We M/s. _____

Address _____ hereby authorize

M/s. _____

Address _____

_____ to quote the tender (Tender
title _____

_____) bearing bid no _____ to be submitted on

I/We promise to provide complete technical back up to them whenever required during the entire contract period.

Place :-

Date :-

Sign of Authorized Signatory

& Seal of Manufacturer