BRIHANMUMBAI MUNICIPAL CORPORATION

(HYDRAULIC ENGINEER'S DEPARTMENT)



e-TENDER FOR

Name of Work:- The work of Supply, Installation, Testing & Commissioning of pump sets with allied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II.

STANDARD BID DOCUMENT

Bid No.:2024_MCGM_1110778_1

Website: https://mahatenders.gov.in

Office of: Deputy Hydraulic Engineer (Maint.),

Municipal water works yard, Lal Bahadur Shastri Marg,

Ghatkopar (West), Mumbai -400086

Prepa	ared by	Checked by	Verified by	Approved by
Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
S.E(P/S.)-II	S.E(P/S.)	A.E(M)W.W.E.S.II	E.E(H.W)W.W.	Dy.H.E(Maint)

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^{*}Requirement of additional special conditions be incorporated in accordance to the circulars issued by various departments from time to time.

SECTION 1 e-TENDER NOTICE

BRIHANMUMBAI MUNICIPAL CORPORATION

(HYDRAULIC ENGINEER'S DEPARTMENT)
Dy.HE/5049/Maint;Dtd.09.10.2024

e-TENDER NOTICE

Subject : The work of Supply, Installation, Testing & Commissioning of pump sets with allied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II.

The Brihanmumbai Municipal Corporation (BMC) invites e-tender on item rate / Percentage Rate Basis to appoint Contractor for the aforementioned work. Bidding Process will comprise of THREE stages. The bidder as prime contractor shall have supplied, installed, tested and commissioned **or** replaced Horizontal Split Case type pump set (pump & motor) equal to **40 HP** or above and their accessories (in single work order) in the last seven financial years from end date of the tender, also executed minimum one single job of operation and maintenance of electrical driven coupled Horizontal Split Case type pump set (pump & motor) of 40 HP or above and their accessories in BMC or government or semi government or public sector unit in the last Seven (7) years. Documentary proof of Work Orders / performance certificate & plant capacities should be furnished for same.

The application form can be downloaded from Maha Govt.'s portal (https://mahatenders.gov.in). As per circular u/No.CA/FRG/09;Dtd.04.10.2024, Tender fee payment of Rs.19,470/- (16500+18% GST i.e.2970/-) is payable online at Maha Govt.'s Mahatenders portal.

The applicants not registered with BMC are mandated to get registered (Vendor Registration) with BMC for e-tendering process & obtain login credentials to participate in the online bidding process.

- i) To download the application form, for those applicants not having vendor registration, need to apply first for vendor registration at the office of Account Officer (FAR), 3rd floor, Municipal Headquarter.
- ii) For e-Tendering registration, please follow the instructions given on Maha Govt.'s portal (https://mahatenders.gov.in).

Name and location of work	Bid No	Contract period	Estimated Cost of Work
The work of Supply, Installation, Testing & Commissioning of pump sets with allied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II	2024_MCGM_1110778_1	For SITC, 12 Months (Inclusive monsoon) For O&M, 36 Months	Not applicable for 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 of Rs.2,00,000/- (Rupees Two Lakh only to be paid online) the "EMD", 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 Maha Govt.'s portal (https://mahatenders.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 Deputy Hydraulic Engineer (Maintenance). 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 Maha Govt.'s portal. (https://mahatenders.gov.in)

The Applicants interested for the above referred works may contact the Deputy Hydraulic Engineer (Maintenance) at the following address on any working day during office hours.

Office of : A.E(M)WWES-II's
Water Works Yard, LBS Marg,
Ghatkopar (West), Mumbai- 400 086.

The applicants may wish to visit the site under reference located at Ghatkopar Yard, a part of Eastern Suburb of Mumbai and can collect the information of the present status from the department who have invited the bids. Pre-bid meeting mentioned in header data will be held at office of Hydraulic Engineer, 1st floor, Engineering Hub Building, Dr. E. Moses Road, Worli, Mumbai-400018.

The BMC 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 Maha Govt.'s portal. (https://mahatenders.gov.in)

Sd/-Dy.H.E.(Maint.)

HEADER DATA

Tender Document No	2024_MCGM_1110778_1
Name of Organization	Brihanmumbai Municipal Corporation
Subject	The work of Supply, Installation, Testing & Commissioning of pump sets with allied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II
Cost of Tender (Tender fee)	Rs.19,470/-(16500+18%GSTi.e.2970/-)
	(9%CGST & 9% SGST)
Cost of E-Tender(Estimated Cost)	Not applicable for item Rate Tender
Bid Security Deposit (EMD)	Rs.2,00,000.00 to be paid online
Date of issue and sale of tender	11.10.2024 from 11:00Hrs
Last date & time for sale of tender	21.10.2024 upto 12:00Hrs
Receipt of Bid Security Deposit (EMD)	21.10.2024 upto 16:00Hrs
Submission of Packet A, B & Packet C(Online)	21.10.2024 upto 16:00Hrs
Pre-Bid Meeting	Not applicable to this tender
Opening of Packet A	22.10.2024 after 16:01 Hrs
Opening of Packet B	22.10.2024 after 16:10 Hrs
Opening of Packet C	29.10.2024 after 15:00Hrs
Address for communication	Office of the:-
	A.E(M)WWES-II's BMC's Water WorksYard,
	LBS Marg, Ghatkopar (W), Mumbai - 400086
Venue for opening of bid	On line in A.E(M)WWES-II's office.

This tender document is not transferable.

The BMC 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.

Sd/-Dy.H.E(Maint.)

SECTION 2 ELIGIBILITY CRITERIA

1.1 Technical Capacity

1) (A) If the bidder has single work order for both SITC and Operation/Maintenance works fulfilling the similar works criteria as below

The tenderer/bidder in their own name should have satisfactorily executed the work of SITC of electrically driven, coupled Horizontal split case pump set (pump & motor) equal to 40 HP or above and their accessories and at least one year of operation & maintenance of electrical driven coupled Horizontal split case pump set (pump & motor) of 40 HP or above and their accessories in a single work order in BMC/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 stated below:-

i) Three similar works as (1) above each costing not less than the amount equal to

Rs.59.98 Lac OR

ii) Two similar works as (1) above each costing not less than the amount equal to

Rs.69.97 Lac OR

iii) One similar work as (1) above costing not less than the amount equal to Rs.99.96 Lac

OR

(B) If the bidder has separate work orders for SITC works and Operation/Maintenance works fulfilling the similar works criteria as below

The value of executed works of SITC of electrically driven, coupled Horizontal split case pump set (pump & motor) equal to 40 HP or above and their accessories as mentioned above, in a single work order in BMC/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 stated below:-

i) Three similar works as (1) above each costing not less than the amount equal to

Rs.38.30 Lac OR

ii) Two similar works as (1) above each costing not less than the amount equal to

Rs.44.67 Lac OR

iii) One similar work as (1) above costing not less than the amount equal to Rs.63.83 Lac

AND

- a) The value of executed works of operation & maintenance of electrical driven coupled Horizontal split case pump set (pump & motor) of 40 HP or above and their accessories in a single work order in BMC/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 stated below:-
- i) Three similar works as (1) above each costing not less than the amount equal to

Rs.21.68 Lac OR

ii) Two similar works as (1) above each costing not less than the amount equal to

Rs.25.30 Lac OR

iii) One similar work as (1) above costing not less than the amount equal to Rs.36.13 Lac

- 2) a) The tenderer shall be either manufacturer of M/s Kirloskar Brothers Ltd. or Mather & Platt (Wilo) or KSB or Jyoti make only OR their authorized dealer /representative/ those who obtain back up guarantee from manufacturer of electrically driven, coupled horizontal split case pump set (pump & motor). If the bidder is not manufacturers then he has to upload scanned copy of manufacturer's authorization certificate in the format given at pg no.144 duly filled, signed & sealed by the respective manufacturer. This manufacturer's authorization certificate must be accompanied with the tender otherwise it shall be out rightly rejected.
- b) Technical data sheet of horizontal split case pump set (pump & motor) at pg no.**115** shall be mandatorily filled in detail and uploaded by the tenderer in packet A/B, failing which tender shall be treated as Non-responsive.
- c) The tenderer shall submit the GA drawings, Cross section of the pump, list of the material and performance curve along with tender document in packet 'B' with the tender otherwise it shall be out rightly rejected.
- d) The tenderer shall submit the Performance Certificate confirming that pumps of the make they have quoted are working in Government/ Semi Government/ Municipal Corporations in India in potable water application for at least 3 years since commissioning with maximum 0.5% decrease in efficiency per annum, duly approved by officer/ Site-In charge Engineer in Government/ Semi Government/ Municipal Corporations in India. If bidder fails to submit this performance certificate, the bid/offer shall be out rightly rejected.
- 3) Bidder shall have valid Electrical contractors license issued by PWD Government of Maharashtra & shall have valid ISO certificate 9001-2008 for SITC, Operation & Maintenance of pump set.
- 4) The bidder shall be registered contractors in mechanical/electrical category in BMC of class 'A' or 'appropriate' class in any Govt./Semi Govt. Dept.
- 5) The bidder shall visit the site along with their engineers and submit the format given in annexure G (Pg no.159) with Packet A & B if failed to submit the same, bidder shall be out rightly rejected.
- 6) Past performance certificate respect of (1) above from the officers not below the rank of Executive Engineer shall be uploaded along with tender bid by the bidder while submitting the bid 7)All the above experiences shall be considered from the date of orders till due date of this Tender.

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 Financial Capacity

The audited annual average turnover of the tenderer shall be **Rs.59.98 Lakh** during last three (3) financial years i.e. 2020-21, 2021-22 & 2022-23 from the due date of the tender.

In case of non-fulfillment of any of the above stated eligibility criteria or submission of improper / incomplete documents mentioned & required as above, the tender shall be rejected out rightly, without assigning any reason.

1.3 Similar Experience:

For assessing the technical capacity of Regular, Routine and Maintenance works; Similar work shall mean that Bidder shall have supplied, installed, tested and commissioned **or** replaced Horizontal Split Case type pump set (pump & motor) equal to **40 HP** or above and their accessories in the last seven financial years from end date of the tender, also executed minimum one single job of operation and maintenance of electrical driven coupled Horizontal Split Case type pump set (pump & motor) of 40 HP or above and their accessories.

2.1 Technical Capacity (Project Experience):

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature BMC /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)

a) Three similar completed works or currently executing three works of similar nature each
costing 30% of estimated cost.*
OR
b) Two similar completed works or currently executing two works of similar nature each
costing 40% of estimated cost.*
OR
c) One completed work or currently executing one work of similar nature of aggregate 60%
of estimated cost.*
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.
*In case of ongoing works to be considered, the bidder must have received payment bills of 80% of the contract sum for the work/works executed last day of month previous to the one in which bids are invited.
2.2 Financial Capacity Achieved a average annual financial turnover as certified by 'Chartered Accountant' (in all classes
of civil engineering construction works only) equal to 30% of the estimated cost of work in last three (3) financial years immediately preceding the Financial Year in which bids are invited. □ To ascertain this, tenderer(s) shall furnish /upload the financial statement (Audited balance)
sheet) duly certified by Chartered Accountant.
☐ The turnover can be enhanced by 10% every year to bring the present level. C) Bid Capacity:
The bid capacity of the prospective bidders will be calculated as under:
Assessed Available Bid Capacity = (A* N* 2 - B) Where.
A = Maximum value of Civil Engineering works executed in any one year (year means Financial year) during the last five years (updated to the price level of the Financial year in which bids are

received at a rate of 10% per year) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the Project/Works, excluding monsoon period, for which these bids are being invited. (E.g. 7 months = 7/12 year) For every intervening monsoon 0.33 shall be added to N.

B = Value of existing commitments (only allotted works) on the last date of submission of bids as per bidding document and on-going works to be completed during the period of completion of

the Project/Works for which these bids are being invited.

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 Brihanmumbai Municipal Corporation (BMC), hereafter also referred as "The Authority", or any of its employees or advisors, 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 Brihanmumbai Municipal Corporation (BMC) 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 Brihanmumbai Municipal Corporation (BMC), its employees or advisors 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. Brihanmumbai Municipal Corporation (BMC) accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed here.

The Brihanmumbai Municipal Corporation (BMC), its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant or Bidder, under any law, statute, 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 Brihanmumbai Municipal Corporation (BMC) 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 Brihanmumbai Municipal Corporation (BMC) 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 Brihanmumbai Municipal Corporation (BMC) 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 Brihanmumbai Municipal Corporation (BMC) 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 Brihanmumbai Municipal Corporation (BMC) 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 Brihanmumbai Municipal Corporation (BMC) 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.

E- Tender Opening and Evaluation of Technical Bid

Information relating to the examination, clarification, evaluation and comparison of E-Tenders and recommendations for the Award of Contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced. Any effort by a Tenderer to influence BMC's processing of E-Tenders or award decisions may result in the rejection of the E-Tender.

SECTION 4 INTRODUCTION

INTRODUCTION

1. Background:

The Brihanmumbai Municipal Corporation (BMC) covers an area of 437.71 sq.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 Brihanmumbai Municipal Corporation (BMC), hereafter called the "Corporation", the primary agency responsible for urban governance in Greater Mumbai.

BMC (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, BMC 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 BMC 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.

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

SECTION 5

e-TENDERING ONLINE

SUBMISSION PROCESS

E-TENDERING ONLINE SUBMISSION PROCESS (As per Guidelines of Maha e-Tender portal)

The terminology of e-Tendering is solely depending upon policies in existence, guidelines and methodology adopted by BMC as per policy. Thereafter as per circular u/No.Dir/IT/505038 of 19.12.2023, it is directed to use e-Procurement system of Govt. of Maharashtra (Mahatenders) for all tenders in BMC instead of SAP SRM system.

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

(1) 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/BMC"

I. Before entering in to online tendering process, the contractors should complete the registration process mentioned on Mahatender Mahaportal & same should be follows so as to get User ID for E-tendering links.

There are two methods for this registration: (II and III)

- II. Transfer from R3 (registered contractors with BMC) to SRM
- a. Contractors already registered with BMC 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. BMC 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 e-mail Id.
- e. Vendor creates his User ID and Password for e-tendering applications by accessing link sent to his mail ID.
- III. Online Self Registration (Temporary registration for applicant not registered with BMC)
- a. Vendor fills up Self Registration form via accessing BMC 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.
- IV. Contractor's Bidding: Applicant will Quote and Upload Tender Documents
- 1. Access e-tender link of Mahatenders Portal
- 2. Log in with User ID and Password
- 3. Selects desired Bid Invitation (he wants to bid)
- 4.The application form can be downloaded from Maha Govt.'s portal (https://mahatenders.gov.in). As per circular u/No.CA/FRG/09;Dtd.04.10.2024, Tender fee payment is payable online at Maha Govt.'s Mahatenders portal.
- 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 (BMC) starts Bid Opening for Packet A after reaching End Date and Time and Bid Evaluation process starts.

As per Three Packet system, the document for Packet A & B is 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 screen shot of receipt of payment in Packet 'A' instead of paying the EMD at any of the CFC centers in BMC Ward Offices.

The e-tender is available on Mahaportal, https://mahatenders.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 'I', Packet 'II' & Packet 'III' of the tenderer will be opened as per the time-table shown in the Header Data in the office of Dy.H.E.(Maint.) Water Works Yard, LBS Marg, Ghatkopar (West).

The Brihanmumbai 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 Maha Portal (https://mahatenders.gov.in) as well as BMC Portal.

Note:- As per circular u/No.Dir/IT/505038 of 19.12.2023, the said e-Tender is published on Mahatenders Mahaportal (https://mahatenders.gov.in). Thus, it is necessary to strictly follow the instructions/ guidelines issued on the said Mahaportal website for the successful participation in the subject bid.

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 Brihanmumbai Municipal Corporation (BMC) 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 Brihanmumbai Municipal Corporation (BMC) in Class "A" and above as per present registration in M&E category 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 BMC 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:

1For Regular, Routine and Maintenance works:

Name of the Dept.	Details of work
H.E.	The work of Supply, Installation, Testing & Commissioning of pump sets with allied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II.

(A) If the bidder has single work order for both SITC and Operation/Maintenance works fulfilling the similar works criteria as below

The tenderer/bidder in their own name should have satisfactorily executed the work of SITC of electrically driven, coupled Horizontal split case pump set (pump & motor) equal to 40 HP or above and their accessories and at least one year of operation & maintenance of electrical driven coupled Horizontal split case pump set (pump & motor) of 40 HP or above and their accessories in a single work order in BMC/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 stated below:-

Rs.59.98 Lac OR

ii) Two similar works as (1) above each costing not less than the amount equal to

Rs.69.97 Lac OR

iii) One similar work as (1) above costing not less than the amount equal to Rs.99.96 Lac

(B) If the bidder has separate work orders for SITC works and Operation/Maintenance works fulfilling the similar works criteria as below

The value of executed works of SITC of electrically driven, coupled Horizontal split case pump set (pump & motor) equal to 40 HP or above and their accessories as mentioned above, in a single work order in BMC/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 stated below:-

i) Three similar works as (1) above each costing not less than the amount equal to

Rs.38.30 Lac OR

ii) Two similar works as (1) above each costing not less than the amount equal to

Rs.44.67 Lac OR

iii) One similar work as (1) above costing not less than the amount equal to Rs.63.83 Lac

AND

- a) The value of executed works of operation & maintenance of electrical driven coupled Horizontal split case pump set (pump & motor) of 40 HP or above and their accessories in a single work order in BMC/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 stated below:-
- i) Three similar works as (1) above each costing not less than the amount equal to

Rs.21.68 Lac OR

ii) Two similar works as (1) above each costing not less than the amount equal to

Rs.25.30 Lac OR

- iii) One similar work as (1) above costing not less than the amount equal to Rs.36.13 Lac
- 2) a) The tenderer shall be either manufacturer of M/s Kirloskar Brothers Ltd. or Mather & Platt (Wilo) or KSB or Jyoti make only OR their authorized dealer /representative/ those who obtain back up guarantee from manufacturer of electrically driven, coupled horizontal split case pump set (pump & motor). If the bidder is not manufacturers then he has to upload scanned copy of manufacturer's authorization certificate in the format given at pg no.144 duly filled, signed & sealed by the respective manufacturer. This manufacturer's authorization certificate must be accompanied with the tender otherwise it shall be out rightly rejected.
- b) Technical data sheet of horizontal split case pump set (pump & motor) at pg no.**115** shall be mandatorily filled in detail and uploaded by the tenderer in packet A/B, failing which tender shall be treated as Non-responsive.
- c) The tenderer shall submit the GA drawings, Cross section of the pump, list of the material and performance curve along with tender document in packet 'B' with the tender otherwise it shall be out rightly rejected.
- d) The tenderer shall submit the Performance Certificate confirming that pumps of the make they have quoted are working in Government/ Semi Government/ Municipal Corporations in India in potable water application for at least 3 years since commissioning with maximum 0.5% decrease in efficiency per annum, duly approved by officer/ Site-In charge Engineer in Government/ Semi Government/ Municipal Corporations in India. If bidder fails to submit this performance certificate, the bid/offer shall be out rightly rejected.
- 3) Bidder shall have valid Electrical contractors license issued by PWD Government of Maharashtra & shall have valid ISO certificate 9001-2008 for SITC, Operation & Maintenance of pump set.
- 4) The bidder shall be registered contractors in mechanical/electrical category in BMC of class 'A' or 'appropriate' class in any Govt./Semi Govt. Dept.

- 5) The bidder shall visit the site along with their engineers and submit the format given in annexure G (Pg no.**159**) with Packet A & B if failed to submit the same, bidder shall be out rightly rejected.
- 6) Past performance certificate respect of (1) above from the officers not below the rank of Executive Engineer shall be uploaded along with tender bid by the bidder while submitting the bid 7)All the above experiences shall be considered from the date of orders till due date of this Tender.

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 Financial Capacity

Achieved an average annual financial turnover as certified by 'Chartered Accountant' (in all classes of civil engineering construction works only) equal to **30%** of the estimated cost of work in **last three (3) financial years** immediately preceding the Financial Year in which bids are invited 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.

2.1Technical Capacity (Project Experience):4

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature BMC /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 in-volved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

- a)Three similar completed works or currently executing three works of similar nature each costing 30% of estimated cost.* or
- b) Two similar completed works or currently executing two works of similar nature each costing 40% of estimated cost.*or
- c) One completed work or currently executing one work of similar nature of aggregate 60% of estimated cost.*

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.

*In case of ongoing works to be considered, the bidder must have received payment bills of 80% of the contract sum for the work/works executed last day of month previous to the one in which bids are invited.

2.2 Financial Capacity

Achieved a average annual financial turnover as certified by 'Chartered Accountant' (in all classes of civil engineering construction works only) equal to 30% of the estimated cost of work in last three (3) financial years immediately preceding the Financial Year in which bids are invited. To ascertain this, tenderer(s) shall furnish /upload the financial statement (Audited balance sheet) duly certified by Chartered Accountant. The turnover can be enhanced by 10% every year to bring the present level.

2.3 Similar experience is spelt in definite sense, such as-

For other works:

For works	As mostly works of M&E dept are of special nature, experience of particular cate-
related to	gories of special work may be added in tender document with prior approval com-
M&E	petent authority i.e. Dy.HE(M)/Ch.E./ DMC(E)/ DMC(Spl.Engg) as the case may
dept	be depending upon the delegation of powers for administrative approval.

C) Bid Capacity:

The bid capacity of the prospective bidders will be calculated as under: Assessed Available Bid Capacity = (A* N* 2 - B) Where,

A = Maximum value of Civil Engineering works executed in any one year (year means Financial year) during **the last five years** (updated to the price level of the Financial year in which bids are received at a rate of 10% per year) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the Project/Works, **excluding monsoon period**, for which these bids are being invited. (E.g. 7 months = 7/12 year) For every intervening monsoon 0.33 shall be added to N.

B = Value of existing commitments (only allotted works) on the last date of submission of bids as per bidding document and on-going works to be completed during the period of completion of the Project/Works for which these bids are being invited.

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. The successful bidder and, to that effect he will ensure commitment on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of BMC.
- b)New and Original Works: The bidder should, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with assessment study of requirements of equipment/plants & machineries to allow the employer to review their proposal. The bidder will ensure his commitment to

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 on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of BMC.

Note:

- 1. Bidders shall submit the undertaking for equipment capability and other undertakings as such on a single Rs.500/- stamp paper.
- E. Technical Personnel: (NA) for subject Tender.

General Guidelines for Fixing Requirement of Technical Staff

Cost of work (Rs. in Lakh)	Qualification	Number	Minimum Experience (Year)	Designation
Above 5 to 10	Graduate Engineer - Graduate Engineer	1	5	Principal Technical Representative
	or Diploma Engi- neer	2	2	Project/Site Engineer
		2	5	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
4	Graduate Engineer / Diploma Engineer	5	Rs.25,000/-p.m.

F. TIME PERIOD OF THE PROJECT:

The work of SITC of pump sets should be completed within 12 months of time from the date of award of contract that includes/excludes Monsoon. The work of O&M of pump sets should be completed within 36 months.

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 Purchase Order is given to the Contractor. 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		1/4 of the time (3 Months)
	••	` ,
½ of the work in		— ½ of the time (6 Months)
	••	` ,
³ ⁄ ₄ of the work in	_	3√4 of the time (9 Months)
	••	` ,
Full of the work in		Full of the time (12 Months)
I dil oi tile work ili	••	Tall of the time (12 Months)

Full work will be completed in 12 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

- **H.** 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 cancelled and legal steps be taken against the contractor for recovery of the amounts.
- I. The amount of Security Deposit retained by the BMC 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 BMC shall be adjusted to- wards the excess cost incurred by the Department on rectification work.

J 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 owning 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 B M C.

- (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 BMC.
- (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.
- (C)To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under Clause (a) above, the contractor shall not be entitled to recover or be paid any sum for any work thereof 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 BMC 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 BMC 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.

K. 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 BMC/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 BMC 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 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 GST Act 2017. 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 GST 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 cooperative 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 BMC.

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

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

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 seven years in prescribed proforma, in the role of prime contractor. Information furnished in the prescribed proforma (Proforma I) shall be supported by the certificate duly self-attested. Documents stating that it has successfully completed during the last seven years at least one contract of similar works as stated in para 'A' of Post qualification.
- b) Annual financial turnover for preceding three financial years as certified by Chartered Accountant preceding the Financial Year in which bids are invited. Copies of Applicants duly audited balance sheet and profit and loss account for the preceding three financial years preceding the Financial Year in which bids are invited. (Proforma II)
- c) 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 bidder's commitment of other contracts (Certificate from Bankers/C.A./Financial Institution shall be accepted as a evidence).(Not Applicable)
- d) The bidder shall give undertaking on Rs.500/-stamp paper that it is his/their sole responsibility to arrange the required machineries either owned/on lease or hire basis, at site before start of the work.
- 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. The successful bidder and, to that effect he will ensure commitment on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of BMC.
- **ii)** New and Original Works: The bidder should, undertake their own studies and furnish with their bid, a detailed construction planning and methodology sup- ported with assessment study of requirements of equipment/plants & machineries to allow the employer to review their proposal. The bidder shall ensure his commitment to 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 on an undertaking on Rs.500 stamp paper to be sub- mitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of BMC.
- **iv)** Details of works in hand (Proforma VI-A & VI-B) (original), along with copies of work orders & attested copies of percentage of works completed or part thereof.
- v) Statement showing assessed available Bid Capacity.
- vi) The undertaking of Rs.500/- stamp paper as per the proforma annexed in 'Annexure B & C' Note: Bidders shall submit the undertaking for equipment capability and other undertakings as such on a single Rs.500/- stamp paper.
- vii) 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. Plant & equipment proposed to be deployed for this work.
- 4 .Site Offices and Laboratories proposed to be set up.
- 5. A note on how the whole work will be carried out (work plan including methodology).
- 6. Quality management plan.
- 7. All the activities included in the Scope of Work shall be covered in the work plan.

Note:

I. The Electrical / Mechanical work shall be got carried out by the civil contractors through the contractors registered with BMC, 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 BMC 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 BMC 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.

Note: If it is found that the tenderer has not submitted required documents in Packet "B" except the document comes under non curable defects 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

- a. Online tender filled in either percentage plus or minus (above or below), or at par. (There is no separate provision to quote % in physical form, this is a part in Header Data of online Tendering). For Packet 'C' tenderer(s) will fill data in 'Item Data Tab' in Service Line Item via Details and quotes his percentage variation figures. (If entered '0' it will be treated as 'at par'. By default the value is zero only).

 Note:
- 1) In case of rebate/premium of 15% and above as quoted by the tenderer, the rate analysis of major items shall be submitted by L1 and L2 bidder after demand notification by e-mail to bidders by concerned office. The format for rate analysis is annexed at Annexure D.
- 2) Rate analysis in prescibed format shall be submitted online to the Engineer in-charge within 3 working days from the date of communication on email, failing which EMD will be forfieted, and next successful/ Responsive bidder will be considered thereafter, negotiation will be done with the said successive/ responsive bidder with respect to his quoted rate.

BID SECURITY or EMD

Revised Guidelines for payment of EMD for tenders to be uploaded on Mahaportal

(As per circular u/No.CA/Finance/Project/19;Dtd.04.03.2024)

1) Mode of payment of EMD:-

A tenderer shall pay entire amount of EMD through payment gateways of GoM on URL http://mahatenders.gov.in. The bidder shall upload scan copy of online paid EMD along with the bid submissionin packet 'A'.

Any bid not accompanied by an acceptable Bid Security shall be rejected by the Employer as non-responsive.

2) If Non-responsive:-

If the bidder is found non-responsive after scrutiny of packet 'A'/'B', in such circumstances, the bidder will be made non-responsive and financial packet 'C' of non-responsive bidder will not be opened. However, there will not be any forefeiture of EMD.

3)Shortfalls:-

Maximum 5 shortfalls of curable defects shall be allowed and in case, curable defects are not complied by bidder within given time period, the bidder shall be treated as 'Non-Responsive' & such cases will be informed to Registration and Monitoring Cell. Such non-submission of documents will be considered as 'Intentional Avoidance' anf if three or more cases in 12 months are reported, shall be viewed seriously and disciplinary action against the defaulters such as banning/de-registration, etc. shall be taken by Registration Cell with due approval of the concerned AMC.

4)Refund of EMD:-

- C) Except successful bidder all other unsuccessful bidder's 100% EMD paid online will be refunded automatically.
- D) The bid security of successful bidder will be discharged when the bidder has signed the agreement and/or furnish the required Security Deposits as elaborated in Standard Bid Document.

5) Forefeiture of Entire EMD:-

The existing conditions laid down in Standard Bid Document regarding forefeiture of entire BID Security (EMD)shall remain unchanged.

Note:

- i) Curable Defect shall mean shortfalls in submission such as:
- a. Non-submission of following documents,
- b. Valid Registration Certificate.
- c. Valid Bank Solvency.
- d. Goods & Service Tax Registration Certificate (GST)
- e.Certified Copies of PAN documents and photographs of individuals owners, etc
- f.Partnership Deed and any other documents.
- g. Undertakings as mentioned in the tender document.
- h. Wrong calculation of Bid Capacity.
- ii) 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. No proper submission of experience certificates and other documents.

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

The Contractor is expected to carry out the work of Supply, Installation, Testing & Commissioning of pump sets and allied works at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward 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 contract. Defective SITC of Pump sets with allied 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 SITC of Pump sets with allied works 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
	For cement concrete road/ Mastic works	5 years
Boods / Bridge	Asphalt work	3 years
Roads / Bridge	Paver Block	3 years
	Structural work	5 years
	General works	5 years
	General works	3 years
BM/SIC/HIC	Structural works	5 years
	Waterproofing works	5 years
Ward Works All ward level works		2 years
Other Works	Pot holes and pre-monsoon bad patch repair work	1 years
For other departments	HE , WSP, SP, SWD, Garden	For M&E works 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

- A. Security Deposit: The security deposit shall mean and comprise of
- I) Contract Deposit and
- II) Retention Money.

I) Contract Deposit – The successful tender, here after referred to as the contractor shall pay an amount equal to Two (2) percent of the contract sum shall be paid within thirty days from the date of issue of letter of acceptance.

The said contract deposit shall be paid in the form of Demand Draft (D.D.) only.

II)Retention Money – The retention money equal to 15.00% of the Contract Sum will be recovered from the contractors every bill i.e.interim / running / final bill. The clause of retention money will not be applicable to M. & E. Department.

B. Additional Security Deposit (Not applicable for Item Rate Tender)

Additional Security Deposit shall be applicable as under:

Rebate quoted by contractor	ASD Applicable
Up to 12% Rebate	No ASD
Rebate above 12.00% on estimated cost	At 2.00% of Estimated cost for each % rebate & part thereof, in D.D. only

The bidders shall submit the ASD as applicable in the form of Demand Draft, which is to be submitted during office hours minimum one day before opening of packet 'C' to respective Head Clerk(Expenditure) of the Engineer in-charge of the HE Division in sealed envelope. If ASD is not applicable then the bidders shall submit sealed envelope mentioning on their letter head 'ASD is not applicable'.

If the bidders fails to submit the sealed envelope as mentioned above at least one day before opening of Packet 'C' within office hours then the EMD of the respective bidders will be forefieted and the company with their Directors/ Partners and other companies with the said Directors/ Partners will be further debarred from any tendering process for the period of at least 2 years.

<u>C: Performance Guarantee (Not applicable for Item Rate Tender and for Mechanical and Electrical work)</u>

The successful tender, here after referred to as the contractor shall pay in the form of "Performance Guarantee" at different rates for different slabs as stated below:

Offer	PG applicable %
For premium, at par and rebate 0 to 12%	PG= 0.92% x contract sum applicable for rebate
	of 12%
	P.G. = {0.92% x contract sum applicable for rebate
For rebate of 12.01%	of 12%} +(X) x contract sum
	where where
	X= percentage rebate quoted more than 12%

Where, X= percentage rebate quoted more than 12%

Note: Contract sum shall mean amount after application of rebate/premium as quoted by the contractor with contingencies only and excluding price variation.

The PG shall be paid in one the following forms.

- 1Cash (In case guarantee amount is less than Rs.10,000/-
- 1Demand Draft (In case guarantee amount is less than Rs.1,00,000/-)
- 2Government securities.
- 3-Fixed Deposit Receipts (FDR) of a Schedule Bank.
- 4-An electronically issued irrevocable bank guarantee bond of any Schedule bank or in the prescribed form given in Annexure.Performance Guarantee is applicable over and above the clause of Security Deposit. Performance Guarantee will have to be paid & shall be valid till the defect liability period or finalization of final bill whichever is later. This deposit will be allowed in the form of I to V as mentioned above and shall be paid within 15 days after receipt of Letter of Acceptance.

Note: Following exceptions shall be adopted for 'Demolition Tenders': Irrespective of the offer (Rebate/ at par/ premium), ASD shall be differed and only PG of 10% of contract sum be taken from the successful bidder on award of contract only. BMC departments shall ensure to incorporate specific condition regarding above in bid document and e-tender notice.

D. Refund of Security Deposit

- I. Refund of Contract Deposit: The Contract Deposit shall be released within 30 days after completion of 3 years of DLP and after issue of 'Defect Liability Certificate' (in case of 1 or 2 or 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.
- II. Refund of Retention Money: One-half (50%)of the Retention Money shall be released within 30 days of issue of 'Certificate of Completion' with respect to the whole of the Works. In the event the Engineer issues a Taking-over Certificate for a section or part of the Permanent Works, only such proposition thereof as the Engineer determines (having regard to the relative value of such section or part of the Works) shall be considered by the Engineer for payment to the Contractor.

The balance Retention Money shall be released within 30 days after completion of 1 year of DLP and after issue of 'Defect Liability Certificate' (in case of 1 or 2 or 3 years DLP) provided that the Engineer is satisfied that there is no demand outstanding against the Contractor. In the event of different. Defects Liability Periods have been specified or become applicable to different sections or parts of the Permanent Works, the said moneys will be released within 30 days on expiration of the latest of such Defects Liability Periods.

Payment of the above mentioned 50% is exclusive of the amounts to be withheld as stated in and that amount shall be paid as per condition stated therein.

- III. Refund of Additional Security Deposit: The additional security deposit shall be released within 30 days of issue of 'Certificate of Completion' with respect to the whole of the Works. In the event the Engineer issues a Taking-over Certificate for a section or part of the Permanent Works, only such proposition thereof as the Engineer determines (having regard to the relative value of such section or part of the Works) shall be considered by the Engineer for payment to the Contractor.
- IV. Refund of Performance Guarantee: The Deposit on account of performance guarantee shall be released within 30 days of completion of Defects Liability Certificate subject finalization of final bill whichever is later and no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor.

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

aTime of Refund for works having 5 years DLP (N.A.)

Deposits refunded after completion	After 3 yrs of DLP	After Completion of DLP
ASD + 50% of RM	CD+50% of RM	PG

a) Time of Refund for works having 1 or 2 or 3 years DLP

Deposits refunded after completion	After Completion of DLP
ASD + 50% of RM	CD+ 50% of RM+PG

Note: a) 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.

- b) 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.
- c) 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 upto 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.

E. Legal + Stationary Charges: (As per applicable circular)

Successful tenderer shall pay the Legal Charges +Stationary charges as per Circular no.26206 of Legal Department; Dtd.31.08.2023.

Sr.No.	Contract Cost	Consolidated Revised Legal & Stationary charges for a period from Dt.01.09.2023 to Dt.31.03.2024
1.	Rs.50,000/-	NIL
2.	Rs.50,001/- to Rs.1,00,00,000/-	0.10% of Contract cost (Rounded off in proportion of 100) plus 18% GST (Minimum charges of Rs.1,000 plus 18% GST and Maximum charges of Rs.1,000 plus 18% GST)
3.	Rs. 1,00,00,001/- to Rs.10,00,00,000/-	Rs.10,000/- for Contract cost upto Rs.1,00,00,000/- plus for higher amount than Rs.1,00,00,000/-; 0.05% of Contract cost (Rounded off in proportion of 100) plus 18% GST is charged.
4.	Rs.10,00,00,001/- to onwards contract	Rs.55,000/- for Contract cost upto Rs.10,00,00,000/- plus for higher amount than Rs.1,00,00,000/-; 0.01% of Contract cost (Rounded off in proportion of 100) plus 18% GST is charged.

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.

F. Stamp Duty: (As per applicable circular at the time of award of contract)

It shall be incumbent on the successful tenderer 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	Five Hundred rupees stamp duty
	in such contract does not exceed	
	rupees ten lakh.	
(b)	Where it exceeds rupees ten lakhs	Five hundred rupees plus one hundred rupees for
		every Rs.1,00,000/- or part thereof, above rupees
		ten lakh subject to the maximum of rupees five lakh
		stamp duty.

- ii. The successful bidder shall enter into a contract agreement with BMC 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 favour 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 Percentage Rate/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 aewwcc02.he@mcgm.gov.in The subject shall clearly bear the following identification / title: "Queries/ Request for Additional Information: TENDER for :- "The work of Supply, Installation, Testing & Commissioning of pump sets with allied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II". Any changes in mail ID will be intimated on the portal.

3. In case of Equal Percentage of lowest bidders (L1), the allotment of work shall be done by giving 48 hrs (2 working days) from the day of opening of packet C on same BID-Document number for re-quoting and such development needs to done by IT department in BMC's SRM system. Till such development is made; 'Sealed Bids' shall be called from the bidders quoting the same rates i.e. L1.

In case of equal percentage of lowest bidders is obtained even after re-quoting, then the successful bidder will be decided by lottery system by concerned Ch.Engg.

The bidder shall need to submit the additional ASD if applicable within 7 days after receipt of notification issued by concerned Chief Engineer.

Also, the Performance Guarantee shall be paid in 15 days after receipt of Letter of Acceptance.

SECTION 7 BILL OF QUANTITIES

BILL OF QUANTITY

	BILL OF QUANTITY						
Sr. No.	Description The work of Supply, Installation, Testing &	Qty Commis	Amount in Rs.	Add Premium/Less Rebate % on Estimated amount pump sets with al-			
	lied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II.						
1	SITC of Pump & Motor set with motor having Head 40 mtrs & Discharge Capacity 50 LPS, coupling, Base plate etc. and other accessories.	2 Sets	ONLINE	ONLINE			
2	SITC of MCC Panel along with allied works as per data sheet, bill of material, specifications and drawings.	1 Job	ONLINE	ONLINE			
3	SITC of 150 mm dia gear operated BFV (4 Nos.), 300 mm dia.gear operated BFV (2 Nos.), 150 mm dia Non-Return Valves (2 Nos) along with 150 mm dia (4 Nos) & 300 mm dia (2 Nos) Dismantling joints for suction & delivery side, pipes & fittings, Pressure Guage, GI piping and PVC drain line etc.as per specifications	1 Job	ONLINE	ONLINE			
4	Complete Cabling with provision of Cable Tray & Station lighting of Pump room as per specifications.	1 Job	ONLINE	ONLINE			
5	SITC of 3 HP Vaccum pump along with GI piping & fittings works & allied works as per specifications.	1 Job	ONLINE	ONLINE			
6	SITC of Instrumentation system includes Pressure Transmitter (6 Nos), 300 mm dia 2 Nos Full Bore electromagnetic flow meter etc along with necessary cabling work as per specifications	1 Job	ONLINE	ONLINE			
7	SITC of 2 Ton HOT Chain Pulley Hoist along with steel structure	1 Job	ONLINE	ONLINE			
8	Miscallaneous Items	1 Job	ONLINE	ONLINE			
9	Maintenace free Earting Sytem as per specifications	2 Job	ONLINE	ONLINE			
10	Provision of 3 Phase power supply with liasoning	1 Job	ONLINE	ONLINE			
11	Cost of Operation and preventive maintenance as per specifications of Electrician cum operator for 1 shift	36 Months	ONLINE	ONLINE			
12	Cost of Operation and preventive maintenance as per specifications of Labour cum watchman for 3 shifts	36 Months	ONLINE	ONLINE			
13	Cost of Operation and preventive maintenance as per specifications of Reliever for Electrician cum operator for 1 shift per week	36 Months	ONLINE	ONLINE			
14	Cost of Operation and preventive maintenance as per specifications of Reliever for Labour cum watchman for 3 shifts per week	36 Months	ONLINE	ONLINE			
15	Cost of consumables	36 Months	ONLINE	ONLINE			

Note: 1) This page does not need any uploading. The values are to be filled in online in Packet "C". Due to character limitations in packet "C" full description of job cannot be incorporated. The full description can be referred to this page.

2) The Tenderer shall quote inclusive of all taxes other than GST (**Excluding GST**), Levies, Duties, Cess etc. as applicable at the time of bid submission. GST as applicable shall be paid separately on submission of bills/invoice.

Input Tax Credit of GST as available with the bidder will not be claimed separately by BMC. However, while quoting the rates benefit of Input tax credit or exemptions shall be passed on to the BMC by way of equivalent reduction in quoted price.

SECTION 8

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 assignees 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 lump sum 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 Brihanmumbai Municipal Corporation (BMC)

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 BMC.

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 BMC.

The "Engineer" shall mean the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special Engineer, appointed for the time being or any other officer or officers of the Brihanmumbai Municipal Corporation who may be authorized by the commissioner to carry out the functions of the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special 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 competed 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 is given in the Contract Data. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

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:-

iSpecification and /or Drawings (if any) which is instructed by the Employer.

- i)Scope in the Contract which is instructed by the Employer.
- ii)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.

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 (NA)

- 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.
- c. 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 BMC 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
- a. the circumstances warrant such sub-contracting; and
- b. 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 BMC/State Government and has either not completed two years after the date of retirement or has not obtained BMC/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 (N.A.)

- 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.

13. Site Investigation Report (N.A.)

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:

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.

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.

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.

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

16.1The 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 Programme 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

- 17.1The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.
- 17.2 The Contractor shall be responsible for design and safety of Temporary Works.
- 17.3The 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.
- 17.5All 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

18.1The 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 asphaltic 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 recoupment 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. 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 (N.A.)

19.1 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

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, interalia, 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

23. Programme

23.1 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.

- 23.2 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.
- 23.3 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.
- 23.4 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.
- 23.5 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.
- **24.Extension Of Time In Contracts**: Subject to any requirement in the contract as to completion of any portions 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 BMC

- (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 BMC: In the event of any failure or delay by the BMC 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 BMC 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 BMC 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.Engg. for not anticipating the same while preparing estimates and draft tender.

bExtension 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 BMC 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 BMC 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.

25. Delays Ordered by the Engineer

25.1 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.

26. Management Meetings (N.A.)

- 26.1 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.
- 26.2 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

27.1. Work to be open to Inspection and Contractor or Responsible agent to be present (N.A.)

All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his subordinates and the contractor shall at all times during the usual working hours, at all other times, during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in- charge and his 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.

27.2. Notice To Be Given Before Work Is Covered Up (N.A.)

The contractor shall give not less than ten days' notice in writing to the Engineer-In-Charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct 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 Engineer-In-Charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given 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.

27.3 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 Incharge 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.

27.4 Ready Mix Concrete/ Asphalt Mix (N.A.)

- i) The contractor shall have to arrange Ready Mix concrete (RMC)/Asphalt from RMC/ASPHALT producing plants registered with BMC.
- ii) The contractor shall, within a 7 days of award of the work, submit a list of at least three RMC/Asphalt producers with details of such plants including details and number of transit, mixers & pumps etc. to be deployed indicating name of owner/company, its location, capacity, technical establishment. The Engineer-in-charge will reserve right to inspect at any stage and reject the concrete if he is not satisfied about quality of product at the user's end.
- iii) The Engineer-in-charge reserves the right to exercise control over the:
 - a) Calibration check of the RMC/Asphalt plant.
- b) Weight and quantity check on the ingredients, water and admixtures added for batch mixing for RMC plants.
 - c) Time of mixing of concrete/grade of asphalt.
- d) Testing of fresh concrete/asphalt mix, recording of results and declaring the mix fit or unfit for use. This will include continuous control on the work ability during production and taking corrective action, if required.
- e) For exercising such control, the Engineer-in-charge shall periodically depute his authorized representative at the RMC/Asphalt plant. It shall be responsibility of the contractor to ensure that all necessary equipment, manpower & facilities are made available to Engineer-in-charge and or his authorized representative at RMC/Asphalt plant.
- f) All required relevant records of RMC/Asphalt mix shall be made available to the Engineer-in-charge or his authorized representative. Engineer-in-charge shall, as required, specify guidelines & additional procedures for quality control & other parameters in respect of material production& transportation of concrete mix which shall be binding on the contractor & the RMC/Asphalt plant. Only concrete as approved in design mix by Engineer- in-charge shall be produced in RMC plant and transported to the site.
- g) The contactor shall have to produce a copy of challan receipts/SCADA reports/VTS reports as issued by the RMC/Asphalt plant as a documentary proof in lieu of supply of RMC/Asphalt mix before releasing payment.

28. Identifying Defects

- 28.1 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.
- 28.2 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.

29. Tests (N.A.)

29.1 For carrying out mandatory tests as prescribed in the specifications, the Contractor

shall establish field laboratory at the location decided by Engineer. The field laboratory will have minimum of equipments as specified in the Contract Data. The contractor shall be solely responsible for :

- a. Carrying out the mandatory tests prescribed in the Specifications, and
- b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.

29.2 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.

iAll expenditure required to be incurred for taking the samples conveyance, packing shall be borne by the contactor himself.

i. 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.

29.3 Setting of Site Laboratories: (N.A.)

Contractors shall set up a laboratory at site before commencement of work at their cost for performing various tests and at least the following machines and equipments shall be pro- vided therein –

- 1Set of Sieves as per I.R.C. /I.S.
- **1.**Compressive Testing Machine(For new works)
- **2.**Oven, Electrically Operated
- **3.**Weighing Balance (20 kg capacity)
- **4.**3 m straight edge
- 5. Sieve shaker
- **6.**First Aid Box
- **7.** Measuring Jar (for silt content)
- **8.**Other Machines/apparatus as may be directed by the Engineer.
- 9. Vernier Caliber
- 10.Level / Theodolite

All the test records shall be maintained in the site office and made available as and when required. The laboratory must be established within 15 days from the date of receipt of the orders from Engineer In charge. On failure to do so, a penalty of Rs 1000/- per day shall be imposed.

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 five 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.

D. Cost Control

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 (N.A.)

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 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 BMC 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.

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:

The Tenderer shall quote inclusive of all taxes other than GST (Excluding GST), Levies, Duties, Cess etc. as applicable at the time of bid submission. GST as applicable shall be paid separately on submission of bills/invoice.

Input Tax Credit of GST as available with the bidder will not be claimed separately by BMC. However, while quoting the rates benefit of Input tax credit or examptions shall be passed on to the BMC by way of equivalent reduction in quoted price.

39. Currencies

All payments will be made in Indian Rupees.

40. 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 BMC 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.

A percentage of the retention money, over and above the actual retention money as indicated below shall be held back from payments till the finalization of final bill to be submitted as per above and will be paid within 30 days of acceptance of the final bill.

Sr.no.	Amount of Contract Cost	Minimum Payable Amount in final bill
1	Upto Rs.5 Crs.	Rs.10 Lacs or final bill whichever is more
2	Upto Rs.25 Crs.	Rs.1 Crore or final bill amount whichever is more
3	Upto Rs. 50 Crs.	Rs.2 Crores or final bill amount whichever is more
4	Upto Rs.100 Crs.	Rs.4 Crore or final bill amount whichever is more
5	More than Rs.100 Crs	Rs.7 Crore or final bill amount whichever is more

The contractor has 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	Equal to 5% of bill amount			
certain date, up to next 15 days i.e. up to 30 days					
Next 15 days up to 45 days from the dat	e of	Equal to 10% of bill amount			
completion/running bill up to specified date					
If not submitted within 45 days from the date of compl	etion/	Bill will not be admitted for			
R.A. bill		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
- i) any other fundamental breaches as specified in the Contract Data.
- j) 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.

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 unrecoverable 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 afterwards to which a commitment was made.

A) 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 BMC.

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

Not withstanding 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 BMC 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 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.

5. Office for the Engineer (Works costing upto Rs.50 Lakhs) (N.A.)

The Contractor shall at his own cost and to satisfaction of the Engineer provide a small temporary office, at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, telephone with a pre-requisite of egovernance and electronic communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance for Municipal Staff.

6. Office for the Engineer (Works costing above Rs.50 lakhs) (N.A.)

the contractor has to provide conveyance.

The Contractor shall at his own cost and to satisfaction of the Engineer provide a temporary office at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, latrines, with doors, windows, locks, bolts and fastenings sufficient for security for the Engineer, and his subordinates, as close to the works from time to time in progress as can be conveniently arranged, and shall at his own cost furnish the office with such chairs, tables, lockers, locks and fastenings as may be required by the Engineer, and no expense of any kind in connection with the erection or upkeep of the offices or fittings shall be borne by the Corporation, but all such work shall be carried out by the Contractor and the expenses thereof defrayed by him. The Contractor shall also make water connections and fit up stand pipe with a bib tap at each office. The latrines and the water connections shall be subject to all the conditions herein elsewhere laid down for temporary water connection and latrines generally with all requisite equipments for e-governance and electronic and digital communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance. Also, for staff working beyond working hours

- 7. Permission for provision and removal of office on completion of work: The tenderer shall obtain permission for provision of site office, cement go-down, store, etc. on payment of necessary cost implication. The cement go-down, Watchman cabins, etc. shall be provided as directed and shall be removed by the Tenderers on completion of the work at their cost. It is binding on the Tenderer to fulfill requirements of Environmental Authorities. The location of such office shall be finalized and got approved from the Engineer before erection/commencement work.
- 8. **Contractor's office near works**: The Contractor shall have an office near the works at which notice from the Commissioner or the Engineer may be served and shall, between the hours of sunrise and sunset on all working days, have a clerk or some other authorized person always present at such office upon whom such notices may be served and service of any notices left with such clerk or other authorized person or at such office shall be deemed good service upon the Contractor and such offices shall have pre-requisite facilities for e- governance.

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 stature, 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 BMC 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. BMC 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 BMC on any account unless the contractor shall have submitted a claim in writing to the Eng-in-change within 1 month of the case of such claim occurring.

No interest for delayed payments due to disputes, etc:

It is agreed that the Brihanmumbai Municipal Corporation 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 Brihanmumbai Municipal Corporation 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 Brihanmumbai Municipal Corporation 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 expiration 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 hereinafter 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 Brihanmumbai 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 Price Variation Clause (N.A.)

The Contractor shall be reimbursed or shall refund to the Corporation as he case may be the variation in the value of the work carried out from time to time, depending on whether the prices of material and labour as a whole rise or fall, and the method adopted for such computations shall be as given below, it being clearly understood that the contractor shall have no claim for being reimbursed on the ground that the price of a particular material or group of materials have risen beyond the limits of the presumptions made in the following paras, however, no price variations shall be made applicable for contracts upto 12 months:

AControlled materials: Price variations shall be permitted in respect of these materials the price level of which is controlled by the Government or its agency. The rate ruling on the date of submission of the tender shall be considered as the basic price of such material for adjustment. Any variation in this rate shall be considered for reimbursement to the contractor or refund to be claimed from the contractor as the case may be. The contractor shall, for the purpose of adjustment submit in original the relevant documents from the suppliers.

A)Labour and other materials: For the purpose of this contract and for allowing reimbursement of refund on account of variation of prices of (i) labour, and (ii) materials other than materials mentioned in A above, computation will be based on the formula enunciated below which is based on the presumptions that:

iThe general price level of labour, rises or falls in proportion to the rise or fall of consumer price index number 9 (general) for working class in Mumbai.

- **i)**The general price level of materials rises or falls in proportion to rise or fall of whole-sale price index as published by 'Economic Adviser to Govt. of India'.
- **ii)**And that the component of labour is to the extent of 30 percent of 88 percent and the component of materials is to the extent of 70 percent of 88 percent of the value of the work carried out. The remaining 12 percent being the presumptive profit of the contractor.
- a)Formula for Labour component:

$$VL = (0.88 R) \times 30 \times (1 - IO)$$

b) Formula for Material component:

$$VM = (0.88 R \times 70 - C) \times (W - WO)$$
100 WO

Where -

VL = Amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of index referred to above.

- I = Consumer Price Index number of working class for Mumbai (declared by the Commissioner of Labour and Director of Employment, Mumbai) applicable to the period under reference (base year ending 2004-05 as 100 i.e. new series of indices).
- IO = Consumer price index number for working class for Mumbai (declared by the Commissioner of labour and Director of Employment, Mumbai) prevailing, on the day of 28 days prior to the date of submission of the tender.

- VM = The amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of wholesale price index for period under reference.
- W = Average wholesale price index as published by Economic Adviser to Govt. of India applicable to the period under reference.
- WO = Wholesale price index as stated above prevailing on the day of 28 days prior to the date of submission of the tender.
- R = Total value of the work done during the period under reference as recorded in the Measurement Book excluding water charges and sewerage charges but including cost of excess in respect of item upto 50 percent.
- C = Total value of Controlled materials used for the works as recorded in Measurement Book and paid for at original basic rate plus the value of materials used .

iThe quantity of the Controlled material adopted in working out the value of 'C' shall be inclusive of permitted wastages as / if mentioned in specifications.

i) The basic rate for the supply of controlled material shall be inclusive of all the components of cost of materials excluding transport charges incurred for bringing the material from place of delivery to the site.

Computations based on the above formula will be made for the period of each bill separately and reimbursement will be made to (when the result is plus) and refund will claimed from (when the result is minus) the contractor's next bill. The above formulae will be replaced by the formulae in Annexure-I as and when mentioned in special conditions of contract.

The operative period of the contract for application of price variation shall mean the period commencing from the date of commencement of work mentioned in the work order and ending on the date when time allowed for the work order and ending on the date when time allowed for the work specified in the contract for work expires, taking into consideration, the extension of time, if any, for completion of the work granted by Engineer under the relevant clause of the conditions of contract in cases other than those where such extension is necessitated on account of default of the contractor.

The decision of the Engineer as regards the operative period of the contract shall be final

- iii) Where there is no supply of controlled items to contractor the component 'C' shall be taken as zero.
- C) Adjustment after completion: If the Contractor fails to complete the works within the time for completion adjustment of prices thereafter until the date of completion of the works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices whichever is more favorable to the employer, provided that if an extension of time is granted, the above provision shall apply only to adjustments made after the expiry of such extension of time.
- D) Price variation will be calculated similarly and separately for extra items and / or excess quantities and provisional sums calculated under Sub Clause 10 (b) A (i) & (ii) and Sub

Clause 10(b) B(ii) based on the above formula/formulae in Annexure-I as and when mentioned in Special conditions of contract; IO and WO being the indices applicable to the date on which the rates under Sub Clause 10 (a)A (i) & (ii) and Sub Clause 10 (a) B(iii) are fixed. No price variation shall be admissible for FAIR items created during execution.

80. Maximum Price Variation shall be as follows: (NA for M & E works)

Time Period of Project	Maximum limit of Price Variation
Up to 12 months	No variation allowed
Above12 months to 24 months	5%
Above 24 months	10%

^{*}Approval of AMC/MC shall be obtained before invitation of tender in case of any changes in above.

Note: 1) The extension in time period for the projects originally estimated including monsoon results in change of price variation slabs as mentioned above i.e. from first slab to second slab or from second slab to third slab, then the maximum limit of original slab will prevail.

2) Operative period shall mean original or extended time period of contract.

Extension of Time period	Maximum Price Variation
If original period of 11 months including monsoon extends	No variation allowed
to 16. The operative period will be 11+5 months.	
If original period of 11 months excluding monsoon extends	Maximum 5% variation allowed
to 16. The operative period will be 11+5 months.	

Price Variation during Extended Period of Contract:

(i)Extension Due To Modification & Extension for delay due to BMC: The price variation for the period of extension granted shall be limited to the amount payable as per the indices. In case the indices increases or decreases, above / below the indices applicable, to the last month of the original or extended period vide clause 8 (I) (a) (i) and (ii) of standard GCC

(ii) Extension Of Time For Delay Due To Contractor:

- (a)The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increase, above the indices applicable, to the last month of the original completion period or the extended period vide above clause8(I)(a)(i) and (ii) of standard GCC.
- (b)The price variation shall be limited to the amount payable as per the indices, in case the indices decrease or fall below the indices applicable, to the last month of original / extended period of completion period vide above clause 8(I)(b) of standard GCC, then lower indices shall be adopted.

iiExtension of Time For Delay due to reasons not attributable to BMC and Contractor (Reference Cl.8(d) of Standard GCC):

The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increases or decreases, above/below the indices applicable, to the last month of the original period.

81. 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 bill s 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.
- 82 Banning/de-registration of Agencies of Construction works in BMC.

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

83. JOINT VENTURE: NA

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 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 BMC. 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 vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract condition.
- I) 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 BMC 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-alias, 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 (BMC) 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 BMC 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.

iGoverning Laws - The Joint Venture Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws.

i.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 tender/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.

n. 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 create 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 position 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.
- **e.** All the members of the JV shall certify that they have not been black listed or debarred by BMC 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.
- **f.** 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.

84. 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 1/4 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 undernoted 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: $7\frac{1}{2}$ percent.
- lii) 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.

85. 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 BMC or any organization engaged by the BMC 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 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 Standard 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 Condition of Contract (for Compensation for delay) for this default.
- 3. If the penalization amount exceeds the maximum limit, then the contractor will be liable for being banned/ deregistered from business dealings with BMC and this shall be governed by relative provision in Registration Rules of BMC and Standard General 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.

86. 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.

87. No Claim to Any Payment or Compensation or Alteration In or Restriction of Work

alf 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.

(a)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 un-executed part of the work by giving 10 days prior notice in writing to the Engineer within 30 days of

(b)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 deem 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.

88. 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.

89. 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.

- **90.** Compensation for all damages done intentionally or unintentionally by contractor 's labour whether in or beyond the limits of BMC 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 BMC to contractor under this Contract or otherwise. Contractor shall bear the expenses of defending any action or other legal proceedings that may be awarded by the Court in consequence.
- **91.** 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.

92. 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.

93. 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 BMC, the same shall be recoverable from the contractor forthwith and be included without prejudice to any other remedy of BMC 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.

94. 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.

95. Anti-malaria and other health measures:

Anti-Malaria and other health measures shall be taken as directed by the Executive Health Officer of BMC. 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 BMC 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 BMC on anti- malaria measures to control the situation in addition to fine.

96. Grievance Redressal Mechanism:

BMC has formed a 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, BMC may decide whether the bid process is required to be suspended pending disposal of such review. The BMC 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.

BMC 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 BMC 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 DMC/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 BMC 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 communicate 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 Lac rupees or two percent of the value of the procurement, whichever is higher.

SECTION 9 SPECIFICATIONS & SELECTION OF MATERIAL

SPECIFICATIONS & SELECTION OF MATERIAL

General Specification

- 1)The technical specifications for the work included in this tender are prepared with care with a view not to create any additional work. However, all the items and works which are required for satisfactory completion and guaranteed performance of the system / projects are deemed to be included in the offer and no extra cost will be paid by BMC.
- **2)**The contractor shall extend full cooperation and interaction with other agencies at site, if involved.
- **3)**The contractor must have facilities to undertake this job including adequate plant and machinery.
- **4)**The work shall be carried out with good workmanship following standard engineering practice.
- **5)**The successful contractor shall take utmost care not to cause any nuisance due to noise, welding, operations etc. All the proper precautions shall be taken by them in this respect.
- 6) The contractor shall issue "Identity Card" to all the work force at site.
- **7)**The contractor shall co-operate to municipal staff & other agencies, if any working at installation.
- **8)**All the manpower, machinery and tools etc. required to carry out the work for successful completion of job shall be arranged by contractors only.
- **9)**The cost of any damage to Municipal property injury or death caused during the execution of work or any claim arising out of it shall be recovered from the contractors through their bills.
- **10)**The tenderer shall make their own arrangement for security & safety of their materials and other belongings during erection and commissioning work at site.
- **11)**The successful tenderer has to make his arrangement for loading, unloading, transportation and handling of the equipment. The tenderer shall make immediate arrangement for removal of their belongings after the completion of work.
- **12)**The tenderer shall have to take all safety measures for his staff / labours / materials and safety measures for other live parts during the course of work. For any mishaps etc. if happened the contractors will be held responsible.
- **13)**The tenderer shall inspect the site prior to submission of their offer, so as to assess the site conditions and other details. No claim on account of ignorance of site condition or adverse site condition, etc. will be entertained during the execution of the work.
- **14)**Any material /work carried out which is found to be defective or which does not meet the specifications has to replaced free of cost by the contractors.

- **15)**The work has to be carried out in consultation with the site Engineers.
- **16)**Guarantee Period : 36 month's from the date of satisfactory commissioning of plants at site.
- 17)Inspection: All the charges towards stage / final inspection until dispatch clearance is given shall be borne by the contractors including to and fro travel, inland transport, lodging and boarding, etc. for two Municipal Engineers and total cost offered for the tender should be inclusive of the same.
- **18)**Cost: The Cost quoted should be firm through out the contract period, which shall also includes loading, unloading, packing and forwarding, transportation, freight, transit insurance and all types of taxes, duties, levies, etc.
- **19)**No escalation in the cost of whatsoever nature will be allowed while execution of these works.
- **20)** No charges towards watch & ward will be paid till successful commissioning of panel in all respects or expiry of contract period whichever is later.
- 21) The Municipal Commissioner does not bind himself to accept the lowest or any tender.

22) Solvency Certificates

Bidders shall have to produce along with their tender latest Solvency Certificate (Issued maximum one year prior to the due date of the tender) of at least Rs. 8 Lakh (Rupees Eight Lakh Only) from any Bank recognized by Reserve Bank of India / Govt. of India. The amount of Solvency Certification is worked out as per table below:

Estimated cost in Rs.	Amount of Solvency Certificate in Rs.	
Upto 2 lakh	0.5 Lakh	
Fron 2 lakh to 7.5 lakhs	1.5 Lakhs	
7.5 lakhs to 15 lakhs	3 lakhs	
15 lakhs to 25 lakhs	4 lakhs	
Above 25 lakhs	8 lakhs	

- **23)Penalty**: In addition to clause no 84 in 'General Conditions' on page no 77 & 78 in DT, following penalty is also applicable for each pumping station:
 - a) For failure of any activity for the want of adequate staff or non –operational condition of pump set, valve operation etc. (arising because of negligence on the part of maintenance), due to which the water supply pattern disturbed / suspended in any shift, will involve Rs.5,000/- per day or part thereof & the said amount will be deducted from the contractor's running bill without any intimation to the contractor. In addition to this an average / day payment payable to the contractor will not be paid.
 - b) For causing any damage to any equipment/ system accessories or electrical switch gears/wiring/cabling etc amount equivalent to the replace of the damages in addition to Rs 5000/- for affecting water supply will be deducted from the running bill

- c) The contractor shall have to issue the I card to their staff appointed at this Pumping station failure to wear 'I' card penalty of Rs 50/- per person per day will be imposed to the contractor. The Contractor shall give the uniforms to the staff deployed at this pumping station failure to uniform penalty of Rs 100/- per person per day observed at first time, for second time Rs300/- per person per day and for third time Rs 5000/ per person per day will be imposed to the contractor.
- d) Penalty to be deducted from bill for absenteeism of Contractors Staff

Sr.No	Category	Penalty per shift in Rupees
1.	Electrician cum Pump operator	Per day salary will be recovered
2.	Labour	Per day salary will be recovered
3.	Watchman	Per day salary will be recovered

- 24) Payments: A) For SITC of pump set: a) 70% payment of contract cost will released after supply of all equipments on pro-rata basis for proposed pumping station at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward within 30 days after receipt of bill. b) Remaining 25% payment of contract cost will released after successful installation and testing of pump set along with accessories of all equipments at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward. c) Remaining 5% payment of contract cost will released after successful commissioning of pump set along with accessories of all equipments at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward.
- **B)** For O & M Works: Within 30 Days from the date of receipt of every 3 (three) months bill, subject to satisfactory completion of work as contract terms and conditions through cheque/ ECS/RTGS /NEFT.
- 25) **Contract Period**: 12 months for SITC work of pump sets & 36 months for Operation and preventive maintenance of pump sets from the date of receipt of P.O of respective work.

BRIHANMUMBAI MUNICIPAL CORPORATION

(HYDRAULIC ENGINEER'S DEPARTMENT)

Subject: - The work of Supply, Installation, Testing & Commissioning of pump sets with allied works and three years of operation & preventive maintenance at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II.

Specifications & Scope of work

SCOPE OF THE WORK:

The proposal is initiated by AE WW 'S' Ward through Dy.HE(ES) for improvement of water supply at Duck Line road, Amar Nagar, Khindipada, Bhandup (West). This area is having very old, inadequate size water main network which results in receiving water for short duration and insufficient supply. The said area is located at very high elevation approx. 45 m and all the locality is comprises of slum. Thereafter, HE's approval under reference no-i, it is proposed to provide 2 pump sets (1 working +1standby) having discharge capacity of 50 LPS at 40 Mtrs. head at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward. It is therefore proposed to carry out the work of Supply, Installation, Testing & Commissioning of pump sets and allied works at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II.

The scope of work shall include but not limited to the following:

- **1.ERECTION SERVICES**: Supply, Installation, Testing, and commissioning of 2 (Two) Horizontal Split Case type pump sets, cubical panel and allied accessories etc.
- **2.OPERATION SERVICES**: Operation & preventive Maintenance of 2 (Two) Horizontal Split Case type pump sets, with valves, cubical panel and allied equipment's installed under this contract for the period of three (3) years.

Scope of work: -

In brief the scope of work includes following major items:

- **1.** Supply of 02 Nos. electrically operated pumps having discharge capacity 50 lps against 40 Mtr. head each along with electric squirrel cage induction motor suitable to operate above offered pumps.
- **2.** Supply of Gear operated 150 mm dia.Butterfly Valve & 150 mm dia. dismantling Joint along with piping at suction line (02 Set.).
- **3.** Supply of Gear operated 150 mm.dia Butterfly Valve, 150 mm dia. NRV & 150 mm dia. Dismantling along with piping at delivery line. (02 Set.)
- **4.** Supply of Gear operated 300 mm. Butterfly Valve, & 300 mm dia. Dismantling along with piping at Suction/Delivery line each.
- **5.** Supply of LT Panels having 6 wire Soft-stat starter combined with Star-Delta starter for each motor with suitable size cables, Termination of cable between Main Incomer and MCC Panel, etc. if necessary as per site condition.
- **6.** Supply, Installation, Testing & Commissioning of Instruments i.e. pressure Transmitter, Vibration Monitoring System & Electromagnetic flow meter.

- 7. Supply, Installation, Testing & Commissioning of Chain pulley block Hoist along with Girder.
- **8.** Installation, Testing & Commissioning of Pump-sets, Electric motor, LT panels, Cable, Valves, Hoist & all other allied equipment.
- **9.** DLP against manufacturing defect shall be provided on all the items supplied. Contractor shall be responsible for any preventive maintenance required to keep the plant healthy.

COMPONENT SPECIFICATION:-

1. PUMPS

- A) Make :- Mather & Platt / Jyoti / KBL / KSB
- B) Type It shall be horizontal axial split case centrifugal pump, coupled to electrical motor through flexible rubber pin bush C.I. Couplings.

C) Material of Construction

i)Casing : Cast Iron IS:210 Grade FG 260

ii)Impeller: SS ASTM A351/M-CF8M

iii)Casing Rings : CI / Bronze / SS.

iv)Shaft : Stainless Steel SS ASTM 276 – 410 ANLD

v)Shaft Sleeve : Stainless Steel SS ASTM 276 – 410H

Sr. No.	Description	Particulars
1	Design Capacity in lps	50
2	Total Head in Mtr.	40
3	Quantity	02 Nos.
4	Synchronous Speed at 50 Hz (rpm)	1475 or suitable
5	Minimum pump efficiency at duty point	80%
6	Recommended Motor Rating in kW	40 HP or Suitable

vi)Base Plate : Mild Steel Fabricated

Horizontal Centrifugal Pump

With a view to address present as well as future cost of energy and in order to reduce post installation cost the Pump manufacturer to follow the Guidelines of Hydraulic. The pump manufacturer shall offer the pumps having latest technology.

1.1 Design Requirement

- 1. The Pump shall be capable of developing the required total head at rated capacity.
- 2. The Total Head Capacity curve shall be continuously rising towards the shut off. The shut off head shall be at least 115% of the total head. The pump duty point shall be within +/- 10% of BEP.
 - 3. The required NPSH at duty point shall be at least 1.0 M less than the available NPSH.
- 4. Pumps shall run smooth without undue noise and vibration.

- 5. The Power rating of the Motor shall be the larger of the following:
 - **1)**The maximum power required by the pump in the entire operating range.
 - **2)**115% of the power required at the duty point. Power requirement shall be worked out considering 1% negative tolerance on quoted figure of efficiency.

1.2 Features of Construction

- a)Rotating assembly should be accessible for inspection or maintenance by removing upper
- **b)**Pumps of a particular category shall be identical and shall be suitable of parallel operation with equal load sharing. Components of identical pump shall be interchangeable.
- **c)**Pump casing shall be of robust construction liquid passage should be finished smooth and designed so as to allow free passage of liquid.
- **d)**The impeller shall be of enclosed type, positively locked and keyed to pump shaft. The pump shall be provided with removable and renewable Labyrinth profile casing ring. Materials and hardness of the Impeller and casing wear rings shall be selected to ensure that they are not susceptible to galling and premature wear.
- **e)**The pump shaft shall be supported by end bearings of anti-friction type, located on each side of the pump. Bush bearing will not be accepted. The bearings shall be of grease lubricated, ball or roller bearing type. The bearing on the pump shall be designed to withstand the unbalanced radial & axial hydraulic thrust.
- f)Suitable Gland Packing shall be provided to prevent loss of lubricant and entrance of moisture and dirt.
- **g)**Pump shall be provided with S.S. piping of adequate size for seal flushing.
- **h)**Pump shall be supplied complete Pin bush type Couplings in Cast Iron. The coupling of motor & pumps shall be connected by high tensile steel coupling bolts through rubber bushings.
- i)Non-Sparking Coupling guard bolted to the base plate should be furnished.
- j)The pump unit shall be provided with a structural M. S. "C" channel Base plate. The pump and motor mounted on a common base plate. The base plate shall be of sufficient size and rigid to maintain the pump and motor in proper alignment and position. Suitable holes should be provided for grouting. Foundation bolts should be complete with nuts and washers.
- **k)** Tapping should be provided for suction and discharge nozzles for pressure gauge connection.
- **I)**Ease of access to the parts to be serviced shall be ensured like mechanical seal and Bearings, without removing the upper half casing, recourse to disturb either pipe work or prime mover.

1.3 Coatings:

- Drinking water approved coating shall be applied to liquid flow passage of pump. Coating should be anti-erosion, anti-corrosion, cathodic protection, anti-galvanic action, energy efficient and Hydrophobic in nature.
- To enhance the pump efficiency, coating should be applied on pump Impeller and bowl. The offered efficiency increase due to improved surface finish shall be more than mentioned in Hydraulic Institute standard, Coating should be preferably manufactured in India. Surface finish of coating shall be max 0.5 microns Ra preferably or less than values as mentioned in Hydraulic Institute standard, HI 20.3 2010.

Coating Specifications – DFT 1.00 mm tolerance minus 100 microns.

- Base coat Medium viscosity pre accelerated Bisphenol. A polyester glass flake compound cured by the addition of organic compound.
- Intermediate coat A heavy built glass flake coating based on low reactivity, Bisphenol.
 Polyester resin pre accelerated. A two pack resin system sing organic peroxide.

- Top coat A cold cured highly modified chemically resistant, two pack resin system filled with stabilizing enforcement to reduce cold flow characteristics. The coating should have good gloss with waxy appearance when cured and surface roughness of minimum 0.09 microns.
- The coating should be compatible for potable water and certified by national government certified water laboratory. Documentary evidence for the same to be uploaded in Technical Envelope which is mandatory. The coating also shall ensure sustainability of hydraulic efficiency over longer period.
- **1.4** Following tests shall be performed on each pump in presence of Contractor's Engineers prior to delivery of Pumps. The test shall be carried out with Job Motor. :-
 - **1)**The discharge against a specified head, when motor running at a specified speed under specified suction head and as well as at a different head.
 - **2)**The power absorbed by the pump at the shaft (B.H.P.) under the above specified conditions.
 - 3) Efficiency of the pumps under above specified conditions.
 - **4)**NPSH test on any of the pumps.

1.5 CERTIFICATES: Bidder shall submit:

- i.Material test certificate of all major components of the pumps i.e. a) Casing b) Impeller c)
 Shaft, d) Wearing rings, e) sleeves before commencing the tests at manufacturer's works.
- **ii.**Xerox copies of calibration certificates of all the measuring instruments / equipment used before pump testing shall be handed over to BMC's Engineer.

1.6 FOUNDATION:

Contractors shall cast M 20 concrete foundation for pump sets as required. The contractors shall show the center line of pump and motor to BMC's Engineer and get his prior approval before casting the foundation. The contractors shall do the watering of foundation for proper curing. The contractors shall install the base plate on the foundation. Fix the same with bolts and check levels before placing pump sets on the base plate. After finalization of alignment all the foundation bolts shall be properly grouted with quick setting cement.

1.7 ERECTION SERVICES:

Erection of all the equipment included in this contract / specification shall be carried by the contractors as shown in the attached drawings at Lump-sum price.

Erection rates quoted by the tenderers shall include, to store, erection, supervision, supply of labours, consumable materials and all other material and equipment required for complete erection.

Provision of the supervisory personnel and labour force for commissioning and testing of pumps shall also be included in scope of contract. Contractors shall be responsible for erecting the equipment to the dimension and elevations. Contractors shall correct location of equipment before starting the work. Preliminary arrangement such as excavation for foundation if any, trenches if any, piping work and finishing works such as reconditioning of floor wall etc. shall be included in the contract.

2.0 MOTORS:-

- I.TEFC type, Squirrel cage induction motor to be operated on 415 +/- 10 %, 3phase, 50 Hz, +/- 5%, A.C. supply having Class 'F' Insulation. The mounting surface shall be machined & grooved to active maximum contact area (85%) with necessary nuts & bolts and coupling guard. Motor shall be suitable to above specified pump. It should be directly coupled through flexible rubber bush type C.I. coupling to pump.
- II. Make CGL, Kirloskar, Marathon, ABB, Siemens, Alstom, Jyoti
- III. Type Motor shall be squirrel cage induction motor designed for operation on 415 volts (+/- 10%) 3 phase, 50 Hz (+/- 5%) power supply. The Motor should be High Efficiency.
- **IV.**Type of enclosure Motor shall be totally enclosed fan cooled type as per IP 55.
- **V.**Insulation 'F' Class. The winding shall be impregnated with special varnish & painted with anti- moisture paint.
- **VI.**Output Rated output of the motor shall be at least 10% more than the maximum input required by the pump.
- **VII.**Rating Rating of the motor shall be continuous. Maximum rating at 6 starts per hour against full load torque without injurious heating of insulated windings. Duty S1
- **VIII.**Space heaters Motor shall be incorporated with Anti-condensation heaters operating on 240 volts single-phase A.C. supply of suitable ratings.
- **IX.**Efficiency & Power factor of the motor should be mentioned at full load, $\frac{3}{4}$ load & $\frac{1}{2}$ load.
- **X.**Cable Box Cable box of the motor shall be suitable to accommodate the required sizes of Aluminum cables.
- **XI.**Coupling Pin bush type Couplings in Cast Iron. The coupling of motor & pumps shall be connected by high tensile steel coupling bolts through rubber bushings / Cushion couplings.
- **XII.**Lifting hooks Motor shall be provided with lifting hook of adequate size
- **XIII.** Earth terminals Two earth terminals shall be provided on the frame of the motor.
- **XIV.**Rating plate The rating plate shall be provided on the no removable part of the frame and shall contain following data Manufacturers' name,
 - i)Frame size
 - ii)Serial No
 - iii) Class of rating
 - iv) Class of insulation
 - v) Voltage/ Frequency/ Phases
 - vi) Output in KW / H.P.
 - vii) Full load current
 - viii) R.P.M

- ix) Full load efficiency
- x) Driving / non driving end bearing Nos,
- XV. Noise Level Limited to HIS
- XVI. Vibration Level Limited to HIS

XVII. <u>Testing of Motors</u>:

- **I)**Routine test of Two motors shall be conducted at Manufacturers works in accordance with respective IS in presence of Contractor's Engineers prior to delivery of motors.
- **II)**Xerox copies of calibration certificates of all the measuring instruments / equipment used before motor testing shall be handed over to MCGM's Engineer.

3. VALVES:-

VALVES ON SUCTION & DELIVERY:-

- **i.**Supply of Gear operated150 mm.dia Butterfly Valve, & 150 mm dia. dismantling Joint along with piping at suction line (02 Set.)
- **ii.**Supply of Gear operated 150 mm. dia Butterfly Valve, 150 mm dia. NRV & 150 mm dia. Dismantling joint along with piping at delivery line. (02 Set.)
- **iii.**Supply of Gear operated 300 mm. dia Butterfly Valve, & 300 mm dia. Dismantling joint along with piping at Suction/Delivery line each.
- **iv.**The valves shall be of 10 bar rating & shall be as per BMC approved Technical Specification.

TECHNICAL SPECIFICATION FOR DOUBLE FLANGED BUTTERFLY VALVE -1 BFV DESIGN DETAILS :-

3.1.1 All valves and accessories to be supplied under this contract shall be designed in accordance with A.W.W.A. C-504 & BS - 5155 / BS EN 593 / IS 13095 (wherever applicable) standards for a pressure rating of 10 BAR as detailed in the specifications. All valve operators and accessories shall be designed for pressure rating of the respective valve for 10 BAR as stated in the specifications. All the valves shall be designed for velocity & pressures in both directions.

It shall be in accordance with Appendix - VIII

- 3.1.2 All valves shall be double flanged long body design only. Flangeless valve / short body or wafer type valves are not acceptable. Length over flanges or flange to flange distance for valves shall be as per following formula -
 - Flange to flange distance = 0.4 D + 150 MM
 - Where D is the nominal diameter of the valve in MM.
- 3.1.3 All these valves are to be used for isolation and controlling purpose and as such the pressure of the down-stream side of the valve might be zero when valve is closed and likely to be empty.

- 3.1.4 Each valve shall bear on its body, as cast indications in raised letters, the following information
 - i.Size of valve
 - ii. Pressure rating in bar
 - **iii.**Heat number on valve body / disc / Gear box of the approved foundry, casted in legible raised lettering, on non-machined surface.
- 3.1.5 The design of the valve shall be such that there shall be no contact between the valve seating on the disc and the valve seating of the body in the fully open position. The body seat ring shall be so designed that with slight over travel or under travel at closing position of the disc at the maximum working pressure, the contact between the body seat ring & the disc seat ring shall be firm and should not break the contact under any circumstances prevailing.

TS-2 MANUAL OPERATION OF VALVES:

- 3.2.1 Manually operated valves shall be provided with operators i.e. **gear boxes** that require maximum input force on the hand wheel of not more than 180 Newton's push plus 180 Newton's pull to develop the required operator torque i.e. the torque exerted at the hand wheel shaft or input shaft shall not exceed 180 Newton multiplied by the hand wheel diameter. The diameter of the hand wheel shall not be more than 750 MM which indicates that the torque at the input shaft shall not exceed 135 N-Mtr.
- 3.2.2 Manual operation shall be vertical & by means of a hand wheel fixed to the valve, or with a cap. The hand wheel shall be turned in a clockwise direction to open the valve and shall be clearly marked with the words 'OPEN' and "CLOSE" with arrows in the appropriate directions. The rims of hand wheel shall be machined to a smooth finish.

TS-3 GEAR BOX

The gear operator shall be designed / selected for the torque values for respective sizes of valves considering 15% overload. It shall be designed based on various torques offered by valve.

TS-4 TESTING:

Movement test :-

Each valve with the manual operator mounted on the valve shall be shop operated three times from the fully open position to the fully closed position and reverse, under pressurized flow conditions, to demonstrate that the complete assembly is workable and the torque required for each valve shall be measured with appropriate device and recorded. Number of turns required for full operation along with the time be counted and recorded.

The following tests should be carried out on valve assembly under "open end" test conditions: –

- i. Leakage test (Seat test): With the valve disc in the closed position and one end open to atmosphere, the rated pressure (10 BAR) as stated in the schedule of Guarantees shall be applied to each side of the disc in turn for a period of 10 minutes each. The leakage past the seat from either side shall be nil.
- ii. <u>Hydrostatic test</u>: With both ends closed and the butterfly valve disc in the slightly open position, a pressure of one and a half times the pressure rating (16 BAR) shall be applied as per STD. Under these tests, there shall be no leakage through the metal, the flanged joints or the valve shaft sealing.
- iii. <u>Disc strength test</u>: Finally the disc shall be closed and a differential pressure of one and a half times the pressure rating (16 BAR) shall be applied to each side of the disc in turn as per STD and disc deformation if any shall be checked.

3.2 NON RETURN VALVES

a) Each pump shall be fitted with a non-return valve in the delivery pipe suitable for horizontal mounting. NRV shall be of single door construction and shall be rated for 10 Bar and hydrostatically tested for 15 bar. The valve shall be with non slam quick closing characteristics, without external dampening arrangements. The materials of construction of NRV shall be as follows:

Body : SGI 400/18 OR GGG 40 Or Ductile Iron Gr. 500/7 or GGG50

Doors/diaphragm : SGI 400/18 OR GGG 40/Cast Steel: ASTM A 216 Gr WCB

Or

Ductile Iron Gr 500/7 with EPDM encapsulation

Seats/Faces : Bronze to BS: EN 1982 or Equivalent

b) Each NRV shall be hydraulically tested at Manufacturer's work as per relevant IS. The successful bidder shall submit its drawings for approval.

3.3 **JOINTING MATERIALS** :-

Each valve shall be supplied with all the necessary joint rings, nuts, bolts and washers for completing the joints on both the Flanges of Valve supplied under the contract including the flanges which will be fastened to pipe work. The cost of jointing materials supplied under the contract shall be deemed to have been included in the quoted rates for valves and fittings. Joint rings shall be of flat section at least 5 mm thick. They shall be of rubber. Bolt heads and nuts shall be hexagonal. All fasteners shall be of carbon steel or GI.

3.4 Dismantling Joints, Flanges & Joints: It shall be in accordance with Appendix – VII

GENERAL DESIGN

- 1) Each dismantling joints assembly shall comprise of mild steel plate flange and sleeve, follower flange, thrust flange, drum piece, EPDM rubber seal, complete with all necessary joint rings, nuts bolts, studs and washers for completing the joints on both sides of the valve.
- 2) Flange face Joints rings (i.e. gaskets) shall be of flat section at least 5 mm thick and shall not extend outside the bolt circle if raised face is provided and shall extend up to outer diameter of flange if raise faced is not provided.
- 3) Bolt holes shall be drilled off centers and shall be truly in line end to end with the longitudinal axis (as per relevant table of BS 4504). Bolt heads and nuts shall be hexagonal
- 4) Every valve to be supplied under this contract will be installed next to a dismantling joint. Dismantling joint shall be suitable for use at the pressure rating of the valves, which they accompany and when fully withdrawn shall offer appropriate clearance along the longitudinal axis of the pipe for removing the valve. The material of construction of D.J. shall be mild steel. The flanges shall be drilled strictly in accordance with the table of B.S.4504 only and shall match exactly with corresponding mating valve flanges.
- 5) **DRUM PIECE: -** Drum piece shall be fabricated from the rolled mild steel plates without any circumferential weld joints. The thickness of the thrust flange shall not be less than the thickness of the main flange.
- 6) **FOLLOWER FLANGE:-** Follower flange shall be fabricated from mild steel and shall have a ring of M.S. flat welded to it to have proper sealing arrangement, and to cover rubber seal as per the size of the rubber seal and shall be welded to the flange to full circumference.

3.5 LOOSE STEEL WELDING FLANGES (OR COMPANION FLANGES)

Matching flanges for the side of the valve not attached to flange adaptor shall be fabricated from mild steel plate and shall comply with relevant tables of B.S.4504, specification for flanges and Bolting for Pipes, valves and fittings of respective Metric Series size valve

The flanges shall be drilled strictly in accordance with table of B.S.4504. Loose flanges shall be fabricated along with a skirt of which the I-D shall be equivalent to that of the pipeline enabling the same to be jointed to the pipeline by welding.

3.6 SUPPORT OF PIPEWORK AND VALVES

All necessary supports, saddles, slings, fixing bolts and foundation bolts shall be supplied to support the pipe work and its associated equipment in an approved manner. Valves, meters, strainers and other devices mounted in the pipe work shall be supported independently of the pipes to which they connect. All brackets or other forms of support, which can conveniently be so designed, shall be rigidly built up of steel by welding in preference to the use of castings. No point of passage of pipes through floors or walls shall be used as a point of support, except with the approval of the Engineer's Representative.

3.7 PIPE WORK

All flanges shall be stress relived and machined after welding. If site Engineer desires, Contractor shall provide, suitable concrete supports to the pipe work, as directed by the site Engineer. The contractor shall carry out all the internal pipe work required to connect the pump Suction & delivery. All the pipes and other fittings used for above said work shall be seamless and of mild steel. Thickness of pipe shall not be less than 5 mm. "C" class G.I. pipe with suitable G.I. fitting, three-way cocks shall be used for piping of pressure gauges. Union coupling near the gauges shall be provided to facilitate during replacement of gauges.

3.8 PRESSURE GAUGES

Three pressure gauges (0-100 psi) for delivery line and Three Compound Gauge for suction line of glycerin filled type and 6" dial shall be provided to monitor the pressure. These gauges shall be Fiebig or equivalent make. Connections for these gauges shall be taken from drilling and tapping provided for gauges near suction and delivery flanges of the lower half casing of pump. These connections shall be brought to the wall by means of "C" class 1/2" G.l. pipe, and necessary fittings or 3/8" copper tubing of thick gauge. 'Fiebig' or equivalent make 3-way cock shall be provided near gauges to release air trapped. Gauges shall be properly mounted on the wall. G.l. pipe shall be clamped properly to floor / wall by means of appropriate size saddles and screws.

4. TECHNICAL SPECIFICATION OF M.C.C. PANEL ALONG WITH STAR - DELTA & SOFT STARTER & CABLE ETC.

Main Central Control L.V. Cubicle Panel shall be designed and fabricated with capacitor banks as per specifications, Details, Drawing, site conditions for 30 KW or suitable rating Squirrel Cage Induction Motor.

4.1 ELECTRICAL DATA:

The M.C.C. and all components should be capable for working on A.C. 415 Volts (± 10%) supply at the frequency of 50 Hz (±5%).

4.2 CONSTRUCTION:

The panel shall be fabricated as per drawing approved by BMC. It shall be fabricated from 14 SWG thick CRCA sheet steel in modular construction. Multi-section arrangement of uniform height, self supporting with standardized compartments and shall be fabricated from heavy M.S. 14 SWG formed frame for individual sections. Bus bar and cable alleys segregated components shall be provided with separator 16 SWG sheet steel partition and doors hinged to the frame work (Hinges removable type with thumb / knob / key lock on other side). All doors shall be held squarely against Neoprene gaskets rendering the same completely vermin proof & dust proof. It shall have window on front door with transparent acrylic to view display of soft starter. The complete Panel shall be mounted on 75 mm height 'C' shaped base frame made up of 10 SWG M.S. sheet. Lifting eyes (Eye Bolts) shall be removable. The sheet steel panel & frame shall be treated for de-rusting; de-greasing, pickling & phosphate coating with 7 tank process. The panel shall be then powder coated for internal as well as external parts with shade as approved by BMC.

4.3 BUS BARS:

The horizontal electrolyte bus bar of tinned copper for 3 Phase and neutral for rating of suitable rating shall be provided in the cubical panel. The size of horizontal bus bar should be suitable to the rating. The size & rating of vertical drop out bus bar shall be as per required current carrying capacity. These bus bars shall be of full length extensible & easily removable type. Bus bars shall be supported on unbreakable non-hygroscopic epoxy supports suitable to withstand short circuit current of 50 KA at least for 1 second. The bus bars shall be suitably insulated with sleeves of red, yellow, blue & black color as per electricity rules. The Horizontal and vertical bus bars shall be provided with at least minimum clearance of 25 mm between two phases. Tapering of sections of the main and sub sections shall not be permitted. The bus bars shall be selected for braced adequate capacity and shall be supported to withstand electrical and mechanical stresses. Drilling on bus bars is permitted for mounting as well as tapping.

4.4 INCOMING for MCC Panel:

The incoming of MCC panel for 30 kW or suitable rated 2 nos. of Motor plus other electrical load should be manually operated draw out type 400 Amp TPN (4P) MCCB. The position of incoming MCCB should be fixed as per site condition and direction of BMC's site Engineers. One Digital Load manager (RS485 Communication Port) with necessary CT's of bar primary construction and voltage isolating fuses shall be provided on the panel.

Panel should have six indicating lamps for R, Y & B phases and 'ON', 'OFF' & 'O/L TRIP' indication. The suitable strip terminal shall be provided to accommodate incoming feeder cable. Incoming terminals are to be shrouded.

It shall be provided with one no. of heavy duty light weight 6"/150mm or 8"/200 mm sweep, Single Phase, suitable rated, continuous rating Exhaust Fan with suitable rating toggle switch as per direction of BMC's site Engineer.

The panel shall be provided with one electric point with CFL lamp of suitable rating and 5 Amp Door switch inside the rear side door of upper compartment of panel as per direction of BMC's site Engineer.

4.5 OUTGOING for 30 kW or suitable rated S.C. R. Motor (2 Nos.): (BOQ-3)

Each Outgoing section of MCC should consist of one no. of 160 Amp TP MCCB with rotary handle. The MCCB shall be interlocked with its own compartment door. Three nos. of indicating lamps for indicating R, Y & B phases after making MCCB 'ON'. One no. of digital Load Manager (With RS485 communication Port) of suitable rating & size (96 mm x 96 mm) with necessary CT's of bar primary construction, one no. of digital counter & time totalizer. It shall be provided with 6 wire soft –starter (In Delta Ckt) starter with their various protection facilities and power contactor operated Star / Delta starter along with Overload trip & SPP protection to operate 30 kW or suitable rated SCR induction motor. The selection of soft-starter or power contactor operated Star- Delta Starter shall be done by connecting suitable rating changeover switch in power ckt and 6 amp C/O switch in control ckt of both the starters.

It shall be provided with seven nos. of indicating lamps to indicate 'RUN', 'BYPASS' 'STOP' & 'TRIP' position of motor with soft starter and 'ON', 'OFF' & 'TRIP' position of motor with Power Contactor operated Star/Delta starter separately.

Each Outgoing section shall be complete with distinct terminated and easily accessible for external power control connections and adequately rated for the requirement of specified current rating. Outgoing terminals are to be shrouded.

Each actuator section of panel shall consist of 1 nos. of actuator feeder for Delivery side sluice valve with suitable ratings MCB as main control to actuator and indicating lamps for indicating 'Control ON', 'OPEN', 'CLOSE' position of actuator.

All indicating lamps should be of LED type with glass lenses of plastic & of Teknic or equivalent make.

Each O/G section for starters shall be provided with one no. of heavy duty light weight 6"/150 mm or 8"/200 mm sweep, Single Phase, suitable rated, continuous rating Exhaust Fan with suitable rating Fuse & toggle switch as per direction of MCGM's site Engineer.

Each O/G section for starters shall be provided with one electric point with CFL lamp of suitable rating and 5 Amp Door switch inside the rear side door of upper compartment of panel as per direction of MCGM's site Engineer.

The panel shall have two nos. of 100 Amp 4P MCCB and 4 nos. of 32 Amps, 4P MCB as spare feeder for any emergency electrical work in the pumping.

4.6 TERMINAL BLOCKS:

Terminal Blocks shall be suitable for accepting specified sizes and numbers of PVC insulated Copper / Aluminum conductor cable for suitable load, if required.

4.7 COMPONENTS:

4.7.1 HRC Fuses, Control Fuses & Semiconductor fuses:-

HRC fuses shall be generally link type wherever necessary & should be of L&T/Siemens/GE make only. Fuse fitting for control circuits with suitable fuses should be of L&T/Siemens/GE make only. Semiconductor fuses for soft-stat starter should be of suitable ratings and Bussman or any reputed make only.

- **4.7.2 Soft –starter:-** Microprocessor based solid state Thyristor controlled 6 wire soft –stat (in Delta Ckt) starter of L&T/Siemens/ ABB/Schneider make only.
- **4.7.3 Contactors:** All Power Contactors and auxiliary contactors shall be of continuous rated for AC3 duty and shall be of L&T / Siemens / ABB/ Schneider make only.
- **4.7.4 Push Button & Indication Lamps: -** Push Buttons shall be of 'Vaishno / Teknic 'make only and Indication lamps shall be of 'Teknic / Siemens' make only.
- **4.7.5** Overload Relay and SPP: Overload relay should be of L&T/Siemens make and S.P.P. should be of Minilec make only.
- **4.7.6 Control Circuit:** Control circuit should be wired up separately with PVC suitable ratings copper conductor wire and designed for 230 / 250 Volts. All control and power wire shall be 1.1 KV grades of standard ISI grade & reputed make only.
- **4.7.7 Power Circuit:** Power Circuit should be wired up separately with copper conductor PVC insulated cables and/or bar conductor wherever necessary. All terminals should suitably shrouded with insulation sleeves / blocks.
- **4.7.8 Capacitor Banks:** Capacitor shall be for indoor installation. Each unit shall be capable of withstanding a continuous over voltage of 10% and hermetically sealed, synthetically impregnated complete with a set of reactance coil &discharge resistant, lighter weight and smaller size as per KVAR. EPCOS / Worldtek / Shreem make low tension Capacitor shall be in the bank of required and specified rating, suitable for operation on 415 +/-6% volts, 3 Ph, 50 Hz AC supply.
- **4.7.9** All the back doors of the panel shall be of removable type. Also ventilation louvers with wire mesh shall be provided for heat dissipation. The compartment of Starters / Cap Bank shall be provided with heavy duty exhaust fan (three nos.) for heat dissipation as said above. The exhaust fan shall be Mounted on rear side panel doors or as suggested by MCGM's Engineers, at safe distance from live Parts of panel. Each motor feeder should have suitable rating capacitor banks with contactor across each motor to achieve desire power factor up to 0.96.

4.8 EARTHING FOR PANEL & MOTOR:-

Earthing bus should run in entire length of panel. The earthing bus shall be suitable for external (two termination) earthing connection to the existing earthing installation of the plant. The charges for the above work are included in the cost of the earthing.

- **4.9** Testing of equipments:-If required by BMC.
- **4.10** Insulation resistance & continuity tests shall be carried out at no extra cost on all the equipment and accessories, if suggested by MCGM Engineers, in accordance with relevant Indian Standards so as to ensure efficient & safe operation.
- **4.11** The successful tenderer should submit the layout dimensional drawings showing plan, Elevation & Side view, Power Circuit Diagram & Control Circuit Diagram. After approval of the same, the tenderer should commence & complete the work in all respect, as per MCGM's Bill of Quantities and rates, technical specifications, terms & conditions of tender etc.
- **4.12** Test reports of all the equipments comprising in the tender such as pumps, motors, panels etc.shall be given from the manufacturer's end along with the dispatch of the material.

4.13 TESTING: -

- **4.13.1 Physical Testing of Panels at Works**: Physical testing of panels with respect to dimensional checking, enclosure sheet guage checking, make and type of components used. The successful tenderer should submit the certificate of '7' tank process of panels as per M.C.G.M. conditions.
- **4.13.2 Electrical Testing of Panel at Works**: The successful tenderer should give requisite tests at Manufacturer's place in presence of MCGM's Engineers:
 - a) I.R. test by Megger of each major electrical component for e.g. Bus Bar, Out Going Terminals, Incoming Terminals, and Cables etc.
 - b) H.V. test for 2.5 kV of Bus Bar.
- **4.13.3 Installation, Testing & Commissioning of Panel at Site**: The complete supply, transport, installation, testing & successful commissioning of Panel on no load & full load at site shall have to be done by successful bidder.
- **4.13.4 Cable Laying & Cable End Termination at Site: -** The Successful tenderer should provide cable end terminations to new cable (&existing cable if any) at site.

4.14 GENERAL:

- **4.14.1** The successful tenderer shall prepare the drawings of
- i) General arrangement diagram,
- ii) Single line diagram of power circuit,
- iii) Line diagram of control circuit and shall submit the same along with bill of material (indicating the make, rating and quantity of each material / equipment / components) for approval of the Municipal Engineers at an earliest after award of the contract. One week period will be taken for approval of the drawing. Delivery / completion period which is inclusive of period required for approval of drawing & shall commence from the date of issue of the work order. Cubical panel shall be fabricated as per the drawings approved and the modification suggested, (if any) by the Municipal Engineer. The panel shall be offer for testing at manufacturers' works if required by BMC.

A copy of control wiring diagram matching with ferrule Nos. of control wiring shall be kept / pasted in the cubical panel at suitable place / location to facilitate during the maintenance.

- **4.14.2** Engraved name plate, rating plates and label for caution notice (Danger Board) with (6mm) size letters shall be provided on each compartment to identify clearly each feeder section and control circuit.
- **4.14.3** Bus bar and Cable compartment door should have Caution Board indicating Nominal supply voltage.
- **4.14.4 Colour** code for bus bars and wires to identify phases and neutral should be used. All control wiring shall be in any one color only.
- **4.14.5** All components shall be mounted for easy access to facilitate maintenance and replacement.

- **4.14.6** The tenderer is requested to visit the site with prior appointment before quoting for the tender for knowing exact nature of the work to be carried out.
- **4.14.7 The** successful tenderer shall have to give necessary operation and maintenance training to MCGM engineers and staff as directed.

5. CABLES AND LUGS:

The cable shall be supplied & laid with Glands, Lugs as per site requirement. The make of the cables shall be Polycab, Asian, Finolex, Incaband or as per SOR and Lugs shall be of make Dowells, Jainson.

6. INSTRUMENTATION SYSTEM:

The technical particulars for instrumentation system shall be as per Appendix - VI

a) Pressure Measuring System

- **1.** Pressure measuring system shall consist of pressure transmitter and digital panel mounted pressure indicator and any other items required to complete the pressure measuring system.
- **2.** Pressure transmitter shall be rugged in construction and shall be suitable for continuous operation. Pressure transmitter shall be designed for operation over 130% of full range.
- **3.** Pressure transmitters shall be suitable for field mounting. They shall provide 4-20 mA DC output proportional to pressure. Transmitter output shall be isolated and shall be suitable for transmitting over long distance. Pressure transmitters shall have degree of weatherproof protection as specified in technical particular. Pressure transmitters shall have LCD/LED display to indicate pressure.
- **4.** The Contractor shall mark the exact location of pressure measuring point on the pipe line and will arrange the equipment and staff required for providing pressure tapping on the lines and shall execute the work. The contractor shall provide all the hardware items including nuts, bolts, pipes, valves, gaskets etc. required for the work.
- **5.** Digital Panel Meters (DPM) shall be microprocessor based and modular in design. They shall accept 4-20 mA DC signals from transmitters. The DPM's shall provide an output of 4-20 mA DC proportional to input signal for retransmitting to RTU. The DPM's shall have back-lit LCD/LED display. Digital panel meters shall have facility to provide power supply to the respective transmitters. DPM shall be mounted at suitable location as directed on electrical panel.

b) Flow Measuring System: -

- 1) Flow Measuring System shall consist of flow sensor/transducers, flow computer & flow transmitter, digital flow indicator & integrator and any other item required for completing the system.
- 2) Flow transducers shall be rugged in construction and shall be suitable for continuous operation. Flow transducers shall have water proof construction and shall be suitable for installation on underground /above ground pipe lines. Insertion /removal of flow sensors shall be possible when pipe lines are pressurized and should be leak proof at 1.5 times the working pressure at that location. Multichannel instruments shall have facility of measuring different flows in single path measurements. With a different set up, the same instruments shall measure flow in a single pipeline with multipath sensor arrangement with higher accuracy of measurement.
- 3) To avoid the effects of disturbances in the velocity profile, a straight and uninterrupted run, upstream as well as downstream from the location of the flow sensor shall be provided, as specified by the flow meter manufacturer.

- 4) Contractor shall finalize the exact location of flow transducers at each site in consultation with site engineer.
- 5) The flow transmitter shall be suitable for field mounting and shall accept input from the flow transducer. It shall process the input signal and provide 4-20 Ma DC output proportional to flow rate and shall be connected as an input to flow indicator cum flow totalize assembly. Flow transmitters shall have LCD display to indicate instantaneous flow rate. The flow range shall be adjustable. The flow meters shall be suitable for measuring flow at velocities of water from 0 to 6 m/sec.
- 6) Flow measurement shall not be affected by physical properties of water viz., temperature, pressure, viscosity, density etc., within given limits. Contractor shall provide compensating electronic circuits, if required.
- 7) Overall accuracy of flow measuring systems shall be at least ±1% of measured value. Repeatability shall be at least ±0.5% of measured value.
- 8) Contractor shall construct a suitable chamber for enclosing flow meter to be installed on underground pipe lines. The flow transmitter should be mounted in the pump room.

NOTES:

- 1. Digital Flow indicator and flow integrator shall be a combined unit.
- 2. Digital flow indicators shall provide 24 V DC/48 V DC power supply to respective flow transmitters in case of two wire transmitters.
- 3. The unit $^{\circ}$ viz., $^{\circ}$ m3 x 10/ m3 x 100 shall be offered such that the resolution of the instrument is high and the 6 digits do not overflow within six months.

Flow Measuring System:-

Full Bore Electro Magnetic Flow meter:-

Flow meter shall be installed along with 300 mm dia. dismantling joint at downstream side. While erection of flow meter fabrication work will be the responsibility of the contractor.

7. GENERAL CONDITIONS:

- **7.1** All the man, machinery and tools etc. required to carry out the work for successful completion of job shall be arranged by contractors only.
- **7.2** It is essential on the part of tenderer to collect complete details of work to be carried out by visiting the site and by visiting office of the address, as no claim shall be entertained later on account of ignorance of site conditions and details required.
- **7.3** The cost of any damage to Municipal property injury or death caused during the execution of work or any claim arising out of it, shall be recovered from the contractors through their bills.
- **7.4** The tenderer shall make their own arrangement for storage, security & safety of their materials and other belongings during its contract period at their cost at work place.
- 7.5 The successful tenderer has to make his own arrangement for loading, unloading, transportation and handling of the equipment. The tenderer shall make immediate arrangement for removal of their belongings after the completion of work.
- **7.6** The tenderers shall have to take all safety measures for his staff / labours / materials during the course of work. For any mishaps etc. if happened the contractors will be held responsible.

- **7.7** The tenderers shall inspect the site prior to submission of their offer, so as to access the site conditions and other details. No claim on account of adverse site condition, etc. will be entertained during the execution of the work.
- **7.8** All the tools and materials required for the job shall be arranged by the successful tenderer at his risk and cost and only free water, electric supply for the installation work shall be provided at site, if available.
- **a**. Any allied work arising during the execution and which is absolutely necessary for the completion of the job shall be carried out by the successful tenderer at his cost.
- **b.**The entire excavated material, if any, is to be removed from the site and the same shall be dumped to the Municipal dumping ground as directed by the MCGM Engineer for any distance. The bidders shall note that no payment will be given for removal & transportation of excavated material. Any claim in respect of this will be refused or rejected.
- **c.** Any material /work carried out which is found to be defective or which does not meet the specifications has to replaced free of cost by the contractors.
- **d.** The layout and the work has to be carried out in consultation with the site Engineers. The BMC reserves the right to modify / alter the layout / design to suit the site conditions.
- **e.**The Pump, Motor, Panel & EOT Crane data sheets attached with tender shall be filled in by the tenderer.
- **f.** The successful tenderer should install the new pump-set and panel step by step and without hampering normal pumping operation as per the instructions of BMC's site Engineer.
 - g. The Municipal Commissioner does not bind himself to accept the lowest or any tender.

No charges towards watch & ward will be paid till successful completion of installation of all the equipment in all respects or expiry of contract period whichever is later.

- 2) OPERATION SERVICES (BOQ 11,12,13,14,15) A)Scope of the work involves under this contract is a daily operation and preventive maintenance of online Booster pumping station [i.e. at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward of the pumps, valves, allied equipments / accessories etc. as listed above for period of 36 months
- B) The Contractor shall inspect the site thoroughly, before submission of tender and get acquainted with the system installed there at.
- C) Contractor shall handover peaceful possession of the entire system/ installation in good working condition to BMC after successful completion of the contract period.
- D) The contractor shall have to submit the list of persons appointed for the job with details such as name, residential address, age, qualification and experience etc. The contractor has to reshuffle his staff step by step in a block period of six months and shall discontinue every employee at least once in span of six months. Any changes made in the staff shall be informed to Assistant Engineer (M)WWES sitting at Ghatkopar in writing with details as stated above and obtain its approval before deploying the staff on the job.
- E) The contractor shall take care of weekly offs of the staff appointed by him. BMC does not take any responsibility for any other paid or unpaid leaves of the staff. The contractor shall have to consider this while appointing the staff and shall have to arrange reliever, if some employee appointed by him proceeds on leave or remains absent.

- F) The contractor and his staff shall have to cooperate with the concerned site Engineers / BMC staff and shall give their best services.
- G) The contractor shall ensure that the plant is maintained in neat and clean.
- H)The contractor shall keep the Municipal Commissioner, their Officers and servants harmless and indemnify from and against all losses, damages, suits, cost charges, claims and demands whatsoever including claim under workman's compensation Act 1923 their officers or servants may sustain, incurred or become liable to pay by reason or in consequences of any injury to person or any property either belong to BMC whether resulting directly through any accident or otherwise life or property while operating and maintaining the said plant and when carrying any repairs or other works pertaining to their machinery and such damages / injury or loss of life or property shall be made good and or as the case may shall be paid immediately by the tenderer to the satisfaction in all respect of Municipal Commissioner.
- I) Any claim arises due to statutory requirement in the form of compensation / damages etc. to site worker shall be borne by the contractor.
- J) The contractor shall abide with all the necessary provisions of 'Minimum Wages Act' and 'Work-man Compensation Act' and shall follow rules and regulations regarding these Acts. The Contractor Shall have to face any claim, which may be made in violation of these provisions by Govt. Officer, any employee, non-Govt. organization or any other body etc. BMC does not take any responsibility to face such claims whatsoever may be.
- K) The contractor will have to submit the bill at the end of every 3(three) months which will be processed on usual verifications for payment after confirming successful completion work.
- L)The contractor shall have to give the Name, Telephone No./ mobile number and Contact Address of the staff/person concerned to whom the officers of BMC can contact for getting day to day information and during any contingencies or emergencies etc for attending the fault.
- M)The Municipal Commissioner reserves the right to terminate this contract with one months notice in writing without assigning any reason, whatsoever.
- N)The contractor shall have to issue the I card to their staff appointed at this Pumping station failure to wear 'I' card penalty of Rs 50/- per person per day will be imposed to the contractor
- O)Contractor shall give the uniforms to the staff deployed at this pumping station failure to uniform penalty of Rs 100/- per person per day observed at first time, for second time Rs300/- per person per day and for third time Rs 5000/ per person per day will be imposed to the contractor.
- P)Rates quotes in Schedule I, Schedule IA, Schedule IB shall be fixed for 3 years for all pumping station included in subject work & no price escalation will be given for subsequent years.
- Q) The contractor shall quote on item rate basis only.

I)OPERATION OF THE PUMPING STATION:-

- 1) Pump set shall be operated daily during the pumping hours by the staff of the contractor.
- 2)Staff appointed by the contractor shall also be responsible to operate the valves in the premises of pumping station according to the pumping schedule.
- 3)One Electrician cum pump operator(at least 10 th std pass) having Wireman license issued from PWD with 1 year industrial experience for one shift of 08.00hours, one labour (at least 7 th std pass) must be present at pumping station for one shift of 08.00hours & one watchman (at

least 7 th std pass) must be present at pumping station for three shifts of 08.00hours each.

Present operating hours of this pumping station is 3 hours and same will be informed to the contractor during commissioning of said pumping station.

- 4)Staff appointed shall report for 08.00 hours duty as instructed by BMC's Engineer and shall be present at the pumping station till completion of the water supply hours.
- 5)Staffs on duty have to operate required valves on suction as well as on delivery side daily (Details of the valve operation shall be explained to the contractor.)
- 6)The staff appointed by the contractor shall be competent to handle any type of situation like electricity failure, water supply failure at his own or by consulting the contractor / competent authority of BMC.
- 7)Staff appointed may be asked to perform the work which may not be narrated in the scope of the work but related to the online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward.
- 8)In case of electricity failure from electricity supply co., it will be responsibility of the contractor to get the electricity restored as early as possible by communicating with supplier company.
- 9)Muster/Logbooks must be maintained at pumping station for staff appointed by the contractor. The same shall be produced as and when required by the engineer.

Special Note:-

- 1)All persons deployed for operational activity of the pump sets shall be minimum 18 years of age. Contractor shall ensure that all persons deployed on the job shall be medically fit, healthy, hardworking, honest, obedient & with no bad habits.
- 2)Contractor those who have employed 20 nos. or more than 20 nos. of employees shall have registration certificate under E.P.F & M.P. Act 1952 and E.S.I.C Act 1948, those who have employed less than 20 employees shall have to upload under taking on Two hundred rupees stamp paper.

III) MAINTAINANCE OF THE PUMPING STATION:-

- i. The contractor shall maintain all the equipments i.e. pumps, motors, cubical panel, valves etc. installed in the pumping station as well daily operated valves in the premises, in a such a manner that all the machinery / equipments are preferably ready for operation at any time during the contract period.
- **i.**The contractor shall have to attend breakdown in daily-operated valves, cubical panel etc. as early as possible from incidence noticed by the operator or reported by the local public or the Municipal staff. Consumables like gland packing, grease, cotton waste, Floor cleaner, duster, lugs, PVC insulating tape, HRC fuses, check nuts for valves, Tubes and Indicating lamps have to supply by contractor for the smooth operation of the pump sets. This is inclusive in operation & maintenance cost.
- **ii.**However, in the emergency situations, like when all the pump sets in respective pumping station are found out of order for any reasons, the breakdown of pumps shall be attended by the contractor within 24 hours so as to put the pump in operations in normal condition to meet the water supply.
- **iii.**The contractor shall keep the stock of the consumable material as mentioned above so as to attend repairs on war footing in order to normalize the situation. If the consumable is found damage/burnt, it shall be replaced with new one.
- iv. Grease shall be applied regularly to the bearings of the pump and motors. All the nut bolts of the pumps, motors shall be frequently checked for it's tightness. All the electrical contacts / nut bolts shall also be checked frequently to insure that they are properly secured. If found dam v.aged/corroded it shall be replaced.
- vi. Proper cleanliness shall be maintained at the pumping station. Any activity not mentioned in

the maintenance schedule and is required to be carried out for satisfactory working of the sysem; the contractor should undertake the same without claiming any extra charges.

vii.The contractor has to carry out alignment installed pump & motor with help of laser alignment machine once in three months and report of the same shall be attached along with RA bill. Vertical as well as horizontal tolerance shall be below 0.07. The contractor has to carry out necessary rectification in order to maintain tolerance within limit.

IX) MONTHLY ELECTRICITY BILLS:-

Monthly electricity bills of the New online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward will be paid by B,MC. However it will be the responsibility of the contractor to collect the bill from supply co. and submit the same to office to draw the cheque. Any assistance required for making the payment of electricity bills shall be on the part of the tenderer.

X) Duties: duties and responsibilities of staff deployed

1) Electrician cum pump operator:

- a) The Electrician cum pump operator will also work in shifts, for operational duties and carry out all operations of Pumps and allied activities as well as recording it in logbooks such recordings daily hours shall be necessarily signed by the contractor's staff at the end of daily shift and BMC staff periodically.
- b) The Electrician cum pump operator will also work as maintenance Fitter and shall carry out the work as per the maintenance schedule & he shall also attend the Breakdowns of pump sets as well as allied equipments /accessories during non operation of pump.

2) Labour cum Watchman::

- a)They will help in maintenance and operation activities of pumping station as per instructions of Electrician/ pump operator / BMC officials
- b) They will carry out routine cleanliness work as per instructions of Electrician/ pump operator / BMC officials by contractor staff on duty. The deployed staff without wearing uniform and safety gazettes will be liable for penalty as per terms mentioned above.
- c)They will watch and ward of entire pumping station equipments, also look into surveillance of entire pumping station premises.

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 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Notwithstanding the source, the sand shall be washed using sand washing machine before use.

 Sd/ Sd/ Sd/

 S.E(P/S)-II
 S.E(P/S)
 A.E(M)W.W.E.S-II
 E.E(H.W)W.W

SECTION -14

APPENDIX

<u>APPENDIX – I</u>

STAFF TO BE EMPLOYED DURING OPERATION & MAINTENANCE:

Operational Staff as detailed below :-

Sr. No	Category	No. of staff required	Duty time	Eligibility
1	Electrician cum pump operator	1	1 shift per day	Minimum 10 th standard pass & have electrician/wireman license issued by state Govt. PWD with 1 year industrial experience
2	Labour cum	1	3 shifts	Seventh standard pass with 1 year
	Watchman		per day	industrial experience.
Note:	Note: Operational staff should not leave their duty without reliever of their respective grade			

SEAL & SIGN OF TENDERER

Appendix - II

Penalty to be deducted from bill for absenteeism of Contractors Staff

Sr.No.	Category	Penalty per shift in Rupees
1.	Electrician cum Pump operator	Per day salary will be recovered
2.	Labour cum Watchman	Per day salary will be recovered

SEAL & SIGN OF TENDERER

<u>APPENDIX – III</u>

MAKE OF ELECTRICAL COMPONENTS

Sr.	Description	Make
No.	<u> </u>	
1.	Auto P. F. Correction Relay	L&T / Epcos / Shreem
2.	Current Transformer	Pragati / Indcoil / AE
3.	Selector Switch & C/O Switch	<u>Kaycee / Salzer</u>
4.	Control Fuses	L&T/Siemens/G.E.
5.	Indicating Lamp	L&T /Siemens / Teknic
6.	Over Load Relay	L & T/ Siemens / Schneider
7.	MCCB / MCB	L&T/ Siemens/ Schneider
		Electric/ GE Power/ ABB/ MDS
8.	Timer	L&T/ Siemens
9.	HRC Fuses	L&T/Siemens/G.E.
10.	SPP	Minilec
11.	Power Cable	RPG/Universal/Finolex/CCI
		Polycab / Asian / Nicco
12.	Control Wire	Std. ISI grade make
13.	Soft – Stat starter	L & T / Siemens / ABB/schneider
14.	Contactors	L & T / Siemens / ABB /schneider
15.	Load Manager	L&T / Conzerv / AE
16.	Push Buttons	Siemens / Teknic/L& T
17.	Semiconductor fuses	Bussman / Any reputed
18.	Capacitor Bank	Epcos, Usha, Crompton-
		Greaves, Siemens, L&T,
		Shreem, Worldtech, Sunny
19.	Power Change Over Switch	L&T

<u>APPENDIX – IV</u>
<u>List of Approved makes for major equipment.</u>

Sr. No.	Name of the equipment	Name of the manufacturer	
1	Pump	Mather & Platt / KBL / Jyoti / KSB	
2	Motor	CGL , Kirloskar, Marathon, ABB, Siemens, Alstom,	
		Jyoti	
3	415 Volts Switchgears.	Siemens, L&T., Schneider Electric, GE Power,	
		ABB	
4	MCCB	Schneider Electric, GE Power, L&T, Siemens,	
		ABB	
5	MCB	Schneider Electric, MDS, Siemens.	
6	Electrical Meters	Enercon, Automatic Electric, ABB, Siemens	
7	Power Contactors	L&T, Siemens, ABB	
8	Soft – Stat Starter	L&T, Siemens, ABB	
9	Capacitors	Epcos, Usha, Crompton-Greaves, Siemens, L&T,	
		Shreem, Worldtech, Sunny	
10	Cables	RPG, Universal., Finolex, CCI, Nicco Corporation,	
		Polycab, Havells or as per approved SOR	
11	Actuators (Smart Type)	Rotork, Auma. Limitork, Emerson	
12	Pressure Transmitter	Siemens, Rittmayer, Khrone, Forbes Marshall, ABB	
13	Flow Meters	Forbes Marshal/ ABB/ Adept/ Siemens	

APPENDIX - V TECHNICAL DATA SHEET FOR PUMP

Description	MCGM Requirement	Offered by bidder
Standard of testing / manufacturing	ISO 9906 Gr 2B / BS 5316 Part I & II	
Make	As per Annexure – I	
Liquid	Water	
Temperature	Ambient	
Pump type	Horizontal Split case	
Pump Model	As per manufacturer's standard	
Recommended motor KW/HP	As per manufacturer's standard	
Delivery size in mm	As per manufacturer's standard	
Bearing type	As per manufacturer's standard	
Speed	1475 RPM or suitable	
Min. efficiency	80%	
Head	40 Mtrs.	
Power input at duty point	As per design.	
Capacity at	50 LPS	
Shut off head	As per design.	
NPSH (R)	As per design.	
MATERIAL OF CONSTRUCTION	ON	
Casing	Cast Iron IS:210 Grade FG 260	
Impeller	Ph. Br. IS 28 Gr. 1	
Casing wearing rings	CI / Bronze / SS.	
Shaft	ST ST ASTM A276-410 ANLD	
Shaft sleeve	ST ST ASTM A276-410H	
FEATURES OF CONSTRUCT	ION	
Type of impeller	Closed	
Diameter of impeller	As per design.	
Balancing of impeller	ISO-1940	
Direction of rotation	As per manufacturer's design	

Manufacturer's Seal & Signature

<u>APPENDIX – VI</u> TECHNICAL DATA SHEET FOR MOTOR

	TECHNICAL DATA SHEET FOR MOTOR			
Sr. No.	Parameters	MCGM Requirement	Offered by bidder	
1	Application / Designation	Suitable for rated capacity pump		
2	Make	As per Annexure – I		
3	Application standard	IS 325 and other relevant		
		standard		
4	Rated Output	As per pump design		
5	Rated Speed	1475 RPM or suitable to pump		
		speed		
6	Type of Duty (IS 325 or	Continuous		
	equivalent)			
7	Rated voltage	415 V± 10%		
8	No. of phases	3 Ph		
9	Frequency	50 Hz± 5%		
10	FLC	As per manufacturer's design		
11	Starting Current	% suitable for soft starter of full		
		load current		
12	Full load Efficiency	% suitable (without any negative		
		tolerance as admissible in		
		relevant standard.) at rated		
40	Folk to a disconnection of the	capacity.		
13	Full load power factor	0.86		
14	Method of starting	Soft Starter / Star- Delta starter		
15	Torque	As non Montres et tras		
a)	Starting	As per Manufacturer		
b)	Pull out	As per Manufacturer		
16	Class of insulation	F- As per specifications		
a)	Ref. ambient Temp Temp. rise by Res. Method	45° C 75° C		
b) 17	Type of enclosure			
18	<u> </u>	Totally Enclosed Air Cooled IP 55		
19	Degree of protection Dimensional drawing	IF JU		
ıσ	enclosed			
20	Space Heaters			
a)	Rated voltage	240 volts		
b)	No. & location	2 No. inside stator		
21	Two earth pads with nuts	Suitable for earth arrangement		
۷.	/bolts arrangement provided	Calladio for barri arrangement		
	on opposite sides, suitable			
	to receive earth conductor			
22	Direction of rotation viewed	Bidirectional.		
	from non-drive end			
23	Method of coupling with the	Pin bush type flexible coupling		
	driven			
24	Sealing arrangement for	Labyrinth or suitable		
	bearings			
25	Details of painting	As per relevant IS		
26	Motor bearings	Anti-friction bearing, grease		
		lubricated at both the ends.		
a)	Details of bearings, type,			
I. \	make for both DE & NDE	Voe		
b)	Motor bearing lubrication	Yes		
07 \	system	10.4700		

As per IS 4729

27 a) Permissible vibration limits

b)	Whether conforming to	Yes	
	standard		
28	Details of power cable, if any		
29	Instructional manual	Required	
30	General arrangement	Required	
	drawing		
31	Test reports	Required	

APPENDIX – VII: NRV

Sr.	Description	Requirement of BMC	Offered by tenderer
No.	_	-	-
A	NRV/CHECK VALVE		
	i) Type:	150 mm dia. Swing type flanged	
		NRV	
	ii) Make :	KBL/IVC/R&D/ or Equivalent	
	1.Test pressure:		
	i) Seat	10 Kgs / Cm ²	
	ii) Body	15 Kgs / Cm ²	
	iv) Material of construction		
	a) Body:	'IS:210 Gr.FG260	
	b) Gate / plate:	'IS:210 Gr.FG260	
	c) Seating:	Bronze, Gr.LTB2	

APPENDIX - VIII: BUTTER FLY VALVE

Sr.	Part Component	For 10 bar Pressure Rating	
No.			
1.	Body	SG1 IS 1865 Gr.500/7	
2.	Disc	SG1 IS 1865 Gr.500/7	
3.	Shaft (DE / NDE)	SS AISI 316/410	
4.	Seal	EPDM Rubber	
5.	Seat Ring/Retaining Ring	SS AISI 316	
6.	Bushes	Steel backed PTFE	
7.	Internal Hardware	SS	
8.	External Hardware	SS	
9.	Hand wheal	Chrome plated /as per manufactured std	
10.	Drilling of valve flange	Drilling of the flange shall be as per Table 10/11 of	
		BS 4504 and thickness of the flange as per the	
		pressure rating of the valve.	

APPENDIX – IX

DETAILS OF MATERIALS FOR DISMANTLING JOINT ASSEMBLY

Sr. No	Description	Material	Standards/ Grade
1	Flange & Sleeve	Mild Steel	IS 2062 Gr.B
2	Follower Flange	Mild Steel	IS 2062 Gr.B
3	Thrust Flange	Mild Steel	IS 2062 Gr.B
4	Seal	Rubber	Nitrile Rubber/EPDM
5	Studs	St. Steel	BS 970 Grade 304
6	Nuts	St. Steel	BS 970 Grade 304
7	Washers	St. Steel	BS 970 Grade 304
8	Gasket	Rubber	

APPENDIX – X-A

Incoming for 30KW or Suitable rating Motor feeders:-

Sr.	Description	Make Offered	Total Qty
No.			
1	400 A (TP+N) /415 V MCCB		1 No.
2	Control Fuses (As per suitable rating)		6 Nos.
3	Main horizontal tinned copper bus bar of suitable ratings.		1 Set
4	Digital Load Manager (with RS485) with suitable ratings C.T. and C.F. & CT disconnecting link.		1 Set
5	CT 400/5 Ampere		3 Nos.
6	RYB phase indicating lamp with C.F.		3 Nos.
7	'ON', 'OFF', 'Trip' indicating lamps with C.F.		3 Nos.
8	Suitable CFL lamp with 5A door switch & C.F. at rear side port of panel.		1 set
9	Heavy duty light wt. 6"/150 mm or 8"/200 mm sweap, 1 phase continuous rating Exhaust fan with suitable rating fuse & toggle switch as per instruction from MCGM's site Engineer.		1 No.
10	Space heater, thermostat and Its Accessories		1 Set
11	Flow totalizer (Instantaneous & Cumulative)		2 Nos.
12	Digital Pressure Indicator		1 Nos.

Outgoing for MCC panel: - 02 Nos. of outgoing sections for 30 kW or suitable rating motors

APPENDIX – X-B

Sr. No.	Description	Offered Make	Total Qty
	Outgoing for 30 kW or suitable rating Motor-02		
	No. Each Comprise of		
	Moulded Case Circuit Breaker		
1	160 Ampere TP MCCB with rotary handle		1 No.
	Digital Load Manager (with RS485) with suitable		1 37
2	ratings C.T. and C.F. & CT disconnecting link.		1 No.
3	CT 150/5 Ampere		3 Nos.
4	RYB Phase Indicating lamps with C.F.		3 Nos.
5	Digital Counter & time Totalizer		1 No.
B.	Soft-stat Starter combined with star –Delta Starter		
1	6 –wire in –delta Ckt. Soft –starter suitable for 30		1 No.
	kW or suitable rating motor.		
2	160 Ampere TP Change over switch		1 No.
3	Overload relay of suitable rating for 30 kW or		1 NI.
	suitable rating motor		1 No.
4	Single phase Preventer		1 No.
5	Run, Bypass, stop & Trip Indication lamps with CF		4 Nos.
6	Start & Stop Push buttons		1 Nos.
7	Auxiliary Contactor 4 NO+4 NC		1 No.
8	Semiconductor Fuses of suitable rating		3 Nos.
9	TP power Contactor, 240 V AC of suitable rating		3 Nos.
10	TP power Contactor, 240 V AC of suitable as star		1 No.
	contactor of suitable rating		
11	On delay /star Delta Timer 240 V AC		1 No.
12	Start & Stop push button		2 sets
13	ON, OFF & trip Indicating lamps with CF		3 Nos.
14	Control fuses		4 Nos.
	5 Amp Changeover switch in control ckt. for		
15	changing over from soft starter to Star /Delta		1 No.
	Starter		
1.6	Suitable CFL lamp with 5A door switch & C.F. at		1 ~~4
16	rear side port of panel.		1 set
	Heavy duty light wt. 6'/150 mm or 8"/200 mm		
17	sweep, 1 Phase continuous rating Exhaust fan with		1 No.
1 /	suitable rating fuse & toggle switch as per		I No.
	instructions from MCGM's Site Engineer		
C.	Spare Feeder For Emergency Electrical Work:-		
1	100 Ampere 4P MCCB		2 Nos.
2	32 Ampere 4P MCB		4 Nos.
D.	Digital Pressure Indicator		6 Nos.
E.	Space Heater, thermostat & Its Accessories in panel		2 sets

<u>APPENDIX- XI</u> TECHNICAL PARTICULARS FOR INSTRUMENT SYSTEM: -

<u>Technical Particulars for Digital Panel Meters for Pressure indicator: -</u>

a)	Туре	Microprocessor based
b)	Display	Digital, seven segment LCD/LED display.
c)	No. of Digits	4 Digit
d)	Input	4-20 mA DC(Isolated) from pressure transmitters
e)	Zero & Span Adjustment	Required
f)	Engineering unit for display	0 to 16 bar
g)	Accuracy	$\pm 1\%$ of span
h)	Enclosure Material	Die Cast aluminum/ABB Plastic
i)	Enclosure Protection	IP-20
j)	Retransmission Output	4-20 mA
k)	Power supply to Transmitters	Required
i)	Communication Port	RS-485(for communication PC system)

Technical Particulars for Pressure Transmitters: -

a)	Quantity	6 Nos.
b)	Overall accuracy of measurement	$\pm 0.5\%$ of measured value
	loop	
c)	Pressure sensors & Transmitter	
i)	Sensor	Diaphragm sensor
ii)	Туре	Indicating type having back-lit LCD display.
iii)	Material	Non corrosive
iv)	Process connection	½" NPT(M) or as per site requirement
v)	Mounting	Field
vi)	Range	Adjustable over full span
vii)	Zero & span Adjustment	Required
viii)	Output	4-20 mA DC(Isolated)
ix)	Enclosure Protection	IP65

Technical Particulars for Flow meter: -Full Bore EM flow Meter: -

1	Quantity	2 Nos. (Inlet & Main Delivery Header)
2	Make	Forbes Marshall/Khrohne/ABB/Adept/Siemens
3	Pipe Line Size	200 mm
4	Range	To be provided by Manufacturer
5	Calibration	On accurate test ring
6	Protection	IP68
7	Principle	Pulse DC field excitation
8	Accuracy	±0.5% FSL
9	Signal Converter	Remote/Field Housing
10	Temperature	-10°C to 70°C
11	Insulation Class for field coils	H class
12	Grounding Rings	Required
13	Measuring tube Material	SS304 or higher grade or lined with Ebonite hard rubber
14	Electrode	Hastalloy
15	Connection Flanges	Carbon steel/SS316L
16	Housing	MS/Die Cast Aluminum
17	Terminal Box	Die cast Aluminum /fiber Glass reinforced polyamide
18	Cable Entries and Gland	½" NPT

19	Display	2 Line LCD
20	Functions	Flow rate, Totalizer, Graph& Status messages
21	Display Units	Lit/s, m^3/h, lit, m^3
22	language	English
23	Indications	Current, Pulse, Status, Flow, Cut-Off, Volume etc.
24	Current output	4-20 mA
25	Load	500Ω
26	Relay output	Min. 2 Nos. (Internally or Externally)
27	Lightning/Surge protection	Two number to be provided at transmitter & panel end.
	system	
28	Power Supply	230V AC/24V DC
29	Housing	Die Cast Aluminum
		Flow Transmitter
1	Type	Indicating type having back-lit LCD/LED display for flow
		rate & Integrated flow.
2	Mounting	Field
3	Input	From (magnetic Flow Tube) flow sensor
4	Output	4-20 mA DC(Isolated)
5	Zero & Span Adjustment	Required
6	Enclosure Protection	IP-65 of IS -13947(Part-I)
7	Accuracy	±0.25% of full scale, ±1 Digit
	Flow	Indicator and Integrator
1	Type	Electronic(Combined Unit)
2	Display	Digital, Seven segment Backlit LCD/LED display
3	Digit Height	As per Mfg. Std.
4	No. of Digit for	
	1)Flow Indicator	4 Digits
	2)Flow Integrator	6 Digits
	Input	4-20 mA DC (Isolated) from flow transmitter
5	Zero & Span Adjustment	Required
6	Manual Reset Facility for flow	Required(Shall be key operated)
	integrator	
	Engineering Units for	
	1.Flow Rate Indicator	MLH
	2.Flow Integrator	M^3, m^3 X 10/m^3X100
7	Enclosure Material	Die cast Aluminum/ABS Plastic
8	Enclosure Protection	IP-20
9	Accuracy	±0.25% of span
10	Communication Port	RS485/RS-232 (For Communication with RTU/HART)
11	Power supply to Transmitters	Required
12	Retransmission Unit	4-20 mA proportional to flow rate
13	High and Low Alarm	Relay output required.

DEVIATION FROM SPECIFICATION & CONDITIONS OF DOCUMENT

THE TENDERER SHALL STATE ANY DEVIATION FROM THE SPECIFICATIONS, TERMS AND CONDITIONS OF DOCUMENT CONTAINED IN THIS OFFER. IRRESPECTIVE OF REFERENCES TO DEVIATIONS MADE IN COVERING LETTER / CORRESPONDENCE / DRAWINGS / CATALOGS, THE TENDERER SHALL LIST SEPARATELY ALL DEVIATIONS IN THIS SCHEDULE. EXCEPT FOR DEVIATIONS BROUGHT OUT SPECIFICALLY IN THIS SCHEDULE, IT WILL BE COMPLETELY IN ACCORDANCE WITH THIS SPECIFICATIONS & THIS INTERPRETATION SHALL BE BINDING ON TENDERER.

Sr.No.	ITEM OR CLAUSE	DEVIATION

Tenderer's seal and Signature

SECTION 10 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 herein above, 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

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;

- **B.**"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:
- **C.**"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
- **D.**"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.

E.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.

F.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 Financer 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 11

PRE BID MEETING

PRE BID MEETING

(Not applicable for this tender)

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. Interested Bidder shall send their queries 2 days prior to the date of Pre – bid meeting only. No queries will be entertained if any queries are not submitted during the said period.

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 Endeavor 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.

12.1 Interpretation of e-Tender Document:

- a) Tenderer(s) shall examine the tender document and acquaint themselves to all conditions and matters affecting the cost of the works. If any tenderer(s) finds discrepancies or omissions in the Document or if in doubt about their meaning, he should address a query during pre -bid meeting.
- b) Any resulting interpretation of the tender document will be issued to tenderer(s) as an addendum. Verbal clarification obtained from any source shall not be binding on the Corporation.
- c) No tenderer(s) shall amend the text of any document except as may be necessary to comply with any addendum.

12.2 <u>Clarification of e-Tendering Documents</u>

Pre-bid meeting (If proposed as per e-Tender notice)

- a) The tenderer or his authorized representative is allowed to attend a pre -bid meeting as per the date, time and venue mentioned in the tender notice/header da ta.
- b) The purpose of the pre-bid meeting will be to clarify issues and to answer questions on any matter that may be raised 2 days prior to the pre-bid meeting.
- c) Any tenderer requiring any clarification of the tender document and/or the works may submit his questions on A.E.(M.)W.W.'s e-mail i.e. aewwcc02.he@mcgm.gov.in ease note that all emails which will reach the inbox 2 days before meeting

SECTION -12

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:-

Α	S.B.I and its subsidiary Banks	В	Nationalized Banks		
1	State Bank Of India.	19	Punjab & Sindh Bank.		
2	State Bank Of Bikaner & Jaipur.	20	Syndicate Bank.		
3	State Bank Of Hyderabad.	21	Union Bank Of India.		
4	State Bank Of Mysore.	22	United Bank Of India.		
5	State Bank Of Patiyala.	23	UCO Bank.		
6	State Bank Of Saurashtra.	24	Vijaya Bank.		
7	State Bank Of Travankore	24A	Corporation Bank		
В	Nationalized Banks	С	Scheduled Commercial Banks		
8	Allahabad Bank.	25	Bank Of Madura Ltd.		
9	Andhra Bank.	26	Bank Of Rajasthan Ltd.		
10	Bank Of Baroda.	27	Banaras State Bank Ltd.		
11	Bank Of India.	28	Bharat Overseas Bank Ltd		
12	Bank Of Maharashtra.	29	Catholic Syrian Bank Ltd.		
13	Central Bank Of India.	30	City Union Bank Ltd.		
14	Dena Bank.	31	Development Credit Bank.		
15	Indian Bank.	32	Dhanalakshmi Bank Ltd		
16	Indian Overseas Bank.	33	Federal Bank Ltd.		
17	Oriental Bank Of Commerce.	34	Indsind Bank Ltd.		
18	Punjab National Bank.	35	I.C.I.C.I Banking Corporation Ltd.		
С	Scheduled Commercial Banks	D	Schedule Urban Co-op Banks		
36	Global Trust Bank Ltd.	61	Sangli Urban Co-op Bank Ltd.		
37	Jammu & Kashmir Bank Ltd.	62	Saraswat Co-op Bank Ltd.		
38	Karnataka Bank Ltd.	63	ShamraoVithal Co-op Bank Ltd.		
39	KarurVysya Bank Ltd.	64	Mahanagar Co-op Bank Ltd.		
45	S.B.I Corporation ∬ Bank Ltd.	65	Citizen Bank Ltd.		
46	Tamilnadu Mercantile Bank Ltd.	66	Yes Bank Ltd.		
47	United Western Bank Ltd.	E	Foreign Banks		
48	Vysya Bank Ltd.	67	ABM AMRO (N.Y.) Bank.		
D	Schedule Urban Co-op Banks	68	American Express Bank Ltd.		
49	Abhyudaya Co-op Bank Ltd.	69	ANZ Grindlays Bank Ltd.		
50	Bassein Catholic Co-op Bank Ltd.	70	Bank Of America N.T. & S.A.		
51	Bharat Co-op Bank Ltd.	71	Bank Of Tokyo Ltd.		
52	Bombay Mercantile Co-op Bank Ltd.	72	Bankindosuez.		
53	Cosmos Co-op Bank Ltd.	73	BanqueNationale de Paris.		
54	Greater Mumbai Co-op Bank Ltd.	74	Barclays bank.		
55	JanataSahakari Bank Ltd.	75	City Bank N.A.		
56	Mumbai District Central Co-op Bank	76	Hongkong & Shanghai banking		
	Ltd.		Corporation.		
57	Maharashtra State Co-op Bank Ltd.	77	Mitsui Taiyokbe Bank Ltd.		
58	New India Co-op Bank Ltd	78	Standard Chartered Bank.		
59	North Canara G.S.B. Co-op Bank Ltd.	79	Cho Hung Bank.		
60	Rupee Co-op Bank Ltd.	130			

SECTION -13

APPENDIX

FORM OF TENDER

To, The Brihanmumbai Municip

The Brihanmumbai Municipal Commissioner Sir.

I/ We have read and examined the following documents relating to the "The work of Supply, Installation, Testing & Commissioning of pump sets and allied works at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II."

Notice inviting tender.

iDirections to tenderers (General and special)

i.General condition of contract for Civil Works of the Brihanmumbai Municipal Corporation as amended up to date.

ii.Relevant drawings

iii. Specifications.

iv. Special directions

v.Annexure A and B.

vi. Bill of Quantities and Rates.

1A.	I/We			(full n	ame in c	apital let	ters,	starting
with su	ırname), the Proprieto	r/ Managing F	Partner/ Manaç	ging Direct	tor/ Hold	der of th	е Ви	ısiness,
for the	e establishment / firm	/ registere	ed company,	named	herein	below,	do	hereby
offer to								

Referred to in the specifications and schedule to the accompanying form of con-tract 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 hereby 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.2,00,000/- (Rs.Two Lakh 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 be- fore the date of communication to me/us of such notice of non/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.
- 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 Brihanmumbai Municipal Corporation for any such losses or inconvenience caused to the Corporation in any manner and will not resist any claim for such compensa- tion 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 cancella- tion 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
	2
	3
	4
	5

Full Name and private residential address of all the partners constituting the Firm

	A/c No.
1	
1	N
2	Name of Bank
3	Name of Branch
4	
	Vender No.

CONTRACT AGREEMENT

E- Tender/quotation	n		Da	ted	DI	ИC(SE) / Al	ИС(P) / I	MC's sand	ction /
Standing Com								Contract	for
the "								1 4	ay of ween
Inhabitants of								bet business	a a
					in		under	the style	and
name of Messrs.			(Her	einafter call	ed "the B	idder") of t	he one	part and	Shri
the Dy. Municipa			-			•		-	
included, unless		•						•	
			•			•			
successors for the		•		-	•				
the Brihanmumba	Municip	al Corporation	(hereinaf	ter called "th	e Corpora	tion") of the	third pa	art. WHE	REAS
the Bidder has t	endered	for the work	s describ	ed above a	and his te	nder has l	peen ac	cepted by	y the
Commissioner (wi	th the ap	proval of the	standing o	committee o	f the Corp	oration) NC	W THIS	AGREEN	/ENT
WITNESSES as fo	ollows: -								
1 In this agreemer	nt words	expressions s	hall have	the same m	eaning as	are respec	tivelv as	sianed to	them
in the Conditions		•			3	•	,	3	
in the Conditions (л Соппа	CUIOI WOIKS HE	remaner	elelled to.					
1)The following d	ocument	s shall be dee	med to fo	rm and be r	ead and c	onstrued as	part of	this agree	men
viz.									
2)In consideration	of the p	ayment to be r	made by tl	ne Commiss	ioner to he	ereby conve	nient wit	h the Cor	nmis
sioner	to	carry		out	the		work		0
"		•							
				" in cor	ntormity in	all respects	s with th	e provisio	ns o
the contract.									
The said Tender	and lette	er of acceptan	ce.	List of Appr	oved Banl	(S.]	
The conditions of		ot.		Tender For					
The Schedule of				Agreement				_	
Instructions to b The Specificatio				Special Co Drawings	naitions.			-	
The Appendices				Minutes of	pre – Bid N	Meetina		-	
The performance		y.		Addendum	•			1	
					· •			-	
The Commissione	r hereby	/ convenient t	o pay to	tne Bidder i	n conside	ration of ca	arrying o	ut the wo	ork of
"									
							·;	the Co	ntrac
Price at times in the	a manna	ar nrocarihad b	w tha Car	tract					

IN WITNESS WHEREOF the parties hereto have caused their respective common seals to be hereunto affixed (for have hereunto set their respective hands and seals) the day and year above written.

Signed and delivered by the	
Bidder in the presence of & style of	
in the presence of & style of	Trading under the name
	Bidders.
Full name	
Address	
Signed by Dy. Municipal Commissioner	
	-
	-
in the presence	Dy. Municipal Commissioner
of	
The common seal of the Brihanmumbai	
Municipal Corporation was here unto affixed on the20 in	
the presence of two members of the	
standing committee of the Corporation.	
	1
	2
and in the presence of the Marie is all	
and in the presence of the Municipal	
Secretary	Municipal Secretary
	wuniopai Secretary

Note:

The successful bidder will have to pay for preparing contract documents, legal charges, stamp duty and stationery charges as mentioned in IT.15

ANNEXURE "A" (Not Applicable)

Name of work: Work of supply and installation of hot dip galvanized mild steel grating and allied work invalve gallery at Ghatkopar High Level Reservoir under A.E.(M.)W.W.E.S-II

The Engineer for this work: Chief Engineer

Dy. Chief Engineer

Executive Engineer

1.Estimated cost of Tender:

Sr. No.	Description of work	Total Amount Rs.
—1	Civil Work	
2.	Mechanical and Electrical Work	
3.	Total Amount	

- 2) Earnest Money (1% of the Estimated cost):
- 3)Time Period:
- 4)Percentage to be charged as supervision charges for the work got executed through other means 10 percent.

 The "Actual cost of the work" shall mean-
 - •In the case of percentage rate contracts the actual cost of the work executed at the rates as mentioned in the Contract Schedule adjusted by the Contractor's percentage rate and cost of extra and excess, but excluding the cost on account of Water Charges and Sewerage Charges if any, payable by the contractor and also excluding cost on account of price variation claims as provided in price variation clause as amended up to date.
 - •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.
 - •In case of lump sum contract the cost of the work actually carried out as per break up and programme of the work and the schedule of payment included in the contract including cost of any excess and/or extra items, of the work, excluding the cost on account of water charges and sewerage charges and also 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 BMC, 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 BMC 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 disfavor 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 BMC 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 BMC 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 dequate 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.

Annexure- C

(On Rs. 500/- Stamp Paper)

Signature of Tenderer/Bidder

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 o has not been charged with any prohibitory and /or penal action such as banning(fo 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, BMC is entitled to carry out the work allotted to me by any other means at my risk and cost, at any stage of the con-tract.
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 o commencement or with respect to the progress of the work in phases, as per the instructions of site in charge

UNDERTAKING FOR BEST PRICE

Bid No:

"I/We (full name in capital letters, starting with surname), the Proprietor/Managing Partner/Managing Director/Holder of the business / Manufacturer / Authorized Dealer, for the establishment/firm/registered company, named herein below, do hereby, state and declare whose names are given herein in below in details with the addresses have not filled in this quotation 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 any establishment / firm or any other person, who have filled in the quotation for the aforesaid work".

"I/We do hereby further undertake that, we have offered the best prices for the subject supply work as per the present market rates. Further, we do hereby undertake and commit that we have not offered/supplied the subject product/similar product/systems or sun systems in the past one year in the Maharashtra State for quantity variation up to -50% or +10% at a price lower than that offered in the present quotation to any other outside agencies including Govt./Semi Govt. Agencies and within BMC also. Further, we have filled in the accompanying quotation with full knowledge of the above liabilities and therefore we will not raise any objection or dispute in any manner related to any action including forfeiture of deposit and blacklisting, for giving any information which is found to be incorrect and against the instruction and direction given in this behalf in this quotation.

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 quotation is false or incorrect ,I/We shall compensate the Brihanmumbai municipal corporation 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 withdrawn by corporation."

However, in case of price difference, if it is a result of differential tax structures, different Dollar value of Rupee, considering this aspect, before invoking the penalty, blacklisting etc., I/We will be given a reasonable opportunity of being heard by representing our case as to why such price variation/differential has been arisen.

In case if the explanation submitted by me/us is unsatisfactory then action as stated above including forfeiture of deposit & blacklisting may be taken against me/us.

Tenderer's Full name, signature and address with rubber stamp

(This affidavit should be given on Rs 500 Stamp Paper duly notarized by Notary with red seal and registration Number.)

UNDERTAKING FORM

To,

The Municipal Commissioner, Brihanmumbai Municipal Corporation.

Bid No.

Subject: The work of Supply, Installation, Testing & Commissioning of pump sets and allied works at proposed online booster pumping station at Duck Line Road, Amar Nagar, Khindipada, Bhandup (West) in 'S' ward under AE(M)WW ES-II.

Sir,

I / We have read all the terms and conditions as stipulated in the above tender notice and accept the same.

Yours faithfully,

Bidder's signature and office stamp

Bidder's full address & telephone no. & Vender Reg. No. if any

Annexure-E

INFORMATION REGARDING STATUS OF BIDDER

(1) (a) Whether it is a proprietor concern	
(b) If so, name of the owner	
(2) If it is a partnership concern, please furnish name of each partner and copy of registration certificate	
(3) In case of company, please furnish the documentary proof to show that the company is registered.	
(4) In case of Joint Venture, please furnish the name of each firm and Joint Venture forms.	
Signature of authorized	

Signature of authorized Person of concern/company

Name of concern/company and seal

Annexure - F

MANUFACTURERS AUTHORISATION CERTIFICATE

(In case of tenderer who are authorized representative of Pump manufacturer)

(On Letter head of Manufacturer)

This is to certify that M/s are	Authorized
Representative of since till date for	dealing in
We authorize them to quote for the tender	
bearing no	lso
period and & after wards and also we hereby assure that we will supply the pump spare	es for the
above said work in 2 months.	
Place : Seal of the Manufacturer & Sign	ı of
Authorized signate	tory
Date:	
[Note:- Copy of Power of Attorney of Authorized Signatory to be submitted along with S Letter]	upport

Annexure -G

FORMATS FOR JOINT VENTURES 1. POWER OF ATTORNEY FOR LEAD PARTNER

(Not Applicable)

TO BE EXECUTED BY ALL MEMBER PARTNERS IN CASE OF JOINT VENTURE (On Non – judicial stamp paper of Rs. 200 duly attested by notary public)

whereas the Brinanmumbal Municipal Corporation (BMC) has invited bids (name of the work).Whereas	tor eas
M/s, M/s	and
M/s (the respective names of the members of the	Joint
Venture along with address of their registered offices)have formed a Joint Venture and	
interested in bidding for the above mentioned work in accordance with the terms and condition	
the tender/contract and Whereas, it is necessary for the partners of the Joint Venture to desig	
one of them as the Lead Partner with all necessary power and authority to do for and on beha	
the Joint Venture, all acts, deeds and things as may be necessary in connection with the	
Venture's bid.	,01110
veinare e pla.	
NOW THIS POWER OF ATTORNEY WITNESSETH THAT:	
We, M/s M/s.	_and
M/s (the respective names of the members of the	Joint
Venture along with address of their registered offices) do hereby desig	nate
M/s(name along with address of the registered office) b	eing
one of the partners of the Joint Venture, as the Lead Partner of the Joint Venture, to do on be	half
of the Joint Venture, all or any of the acts, deed or things necessary or incidental to the	Joint
Venture's bid for the work, including submission of Proposal, participating in confere	nce,
responding to queries, submission of information/ documents and generally to represent the	Joint
Venture in all its dealings with BMC, any other Government Agency or any person, in-connect	ction
with Work until culmination of the process of bidding and thereafter till the Contract Agreeme	nt is
entered into with BMC.	
We here by agree to ratify all acts, deeds and things lawfully done by Lead Partner our	
attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our a	tore
said attorney.	
Dated this dayof201	
[Executants(s)]	

(To be executed by all the Partners of the Joint Venture)

Note:-

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants and when it is so required the same should be under common seal affixed in accordance with the required procedure.

Also wherever required, the executants should submit for verification the extract of the charter documents and documents such as resolution/ Power of attorney in favour of the person executing this Power of attorney for the designation of power here under on behalf of the Joint Venture.

2. POWER OF ATTORNEY TO A PERSON FOR SIGNING OF PROPOSAL

TO BE EXECUTED BY THE LEAD PARTNER IN CASE OF JOINT VENTURE

(On Non – judicial stamp paper of Rs. 200 duly attested by notary public)

Know all men by these presents, we (name and
address of the registered office) do hereby constitute, appoint and authorize Mr. / Ms.
R/o(name and
address of residence) who is presently employed with us and holding the position
of (designation) as our attorney, to do in our name and on our behalf,
all such acts, deeds and things necessary in connection with or incidental to the bid of the Joint
Venture consisting of,
and(please state the name and address of
the members of the Joint Venture) for
(name of the work) including signing and submission of all documents
and providing information/responses to Brihanmumbai Municipal Corporation (BMC),
representing us in all matters in connection with our bid for the said work.
We hereby agree to retify all gets, deeds and things lawfully done by our said atterney nursuant to
We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall
and shall always be deemed to have been done by us.
and shall always be deemed to have been done by us.
For
(Signature)
(Name, Title and Address)
Accept
(Signature)
(Name , Title and Address of the Attorney)
Notes:
Notes.
To be executed by the Lead Partner in case of a Joint Venture.
The mode of execution of Power of Attorney should be in accordance with the procedure, if any, laid
down by the applicable law and the charter decuments of the executants and when it is ac-

- i. The mode of execution of Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants and when it is so required the same should be under common seal affixed in accordance with the required procedure
- ii. Also, wherever required, the executants should submit for verification the extract of the charter documents and documents such as a resolution / Power of attorney in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executants.

BOARD RESOLUTION FOR COMPANIES 3.1 FOR LEAD PARTNER (Not Applicable) available of the Board be and is hereby granted to join the Joint Ve

			ne Board be a	nd is	hereby g	ranted t	to join the	Joint Ve	
witn					addraga	of the	mambara	of the	and
Venture)	for	submission		e and	bid	to	members	BMC	for
venture)	101							DIVIC	101
					(nam	e or the	work)		
"RESOLVED	FURT	HER THAT the	e "draft" Memo	randuı	m of Unde	erstandi	ng ("MoU)	to be er	ntered
into with the	memb	ers of the Joi	nt Venture (a d	ору и	here of c	duly initi	aled by the	e Chairn	nan is
tabled in the	meeting	g) be and is he	reby approved	,,		·	•		
		•	,						
"RESOLVED) F	URTHER	THAT M	lr				(r	name),
-	(de	esignation) be	and is hereby	author	ized to en	nter into	an MoU, or	n behalf	of the
company, wi	th the n	nembers of the	e Joint Venture	and t	o sign the	e form o	f Tender or	ı behalf	of the
Joint Venture	e for sul	omission of the	e bidding docur	nents	and exec	ute a po	wer of atto	rney in t	favour
of the Comp	any as I	_ead partner."							
•	2 500	OTHER MEM	DEDO OE TUE	LOIN	IT VENTU	IDE /No	t Annliach	lo)	
•	FUR	OTHER WIEW	BERS OF THE	JOIN	II VENIU	IKE (NO	і Арріісав	ie)	
"RESOLVED	THAT	approval of the	he Board be a	nd is	hereby g	ranted t	to join the	Joint Ve	enture
with			,						and
				e and	address	of the	members	of the	Joint
Venture)	for	submiss	sion of		bid	to	BM	1C	for
•						(name c	of the work)		
"RESOLVED) FURT	HER THAT the	e "draft" Memo	randuı	m of Unde	erstandi	ng ("MoU)	to be er	ntered
into with the	memb	ers of the Joi	nt Venture (a d	ору и	here of c	duly initi	aled by the	e Chairn	nan is
tabled in the	meeting	g) be and is he	reby approved	,,					
"RESOLVED	\ E	URTHER	THAT Mr					(r	nama)
RESOLVEL							an Mall a		name),
			and is hereby						
-	ith the i		e Joint Ventur					-	
of	sint Vast	,	ame of the Lead	ı Parti	iei oi the	JOINT VE	enture) to a	u as the	; Lead
Partner of Jo	nni ven	ıuı e.							

4. LETTER OF COMMITMENT

(Not Applicable)

(Each member of a Joint Venture has to submit a letter of commitment)

Date:

Place:
То
The Municipal Commissioner
Brihanmumbai Municipal Corporation
Dear Sir,
Subject: (name of the work)
This has reference to the Bid being submitted by (mention
the Lead Partner of the Joint Venture), as Lead Partner of the Bidding Joint Venture comprising
(mention name(s) of the Partners) in respect of (name of the work) in response to the
e-tender notice issued by the BMC dated, 201
We hereby confirm the following.
We (name of the Key Person), have examined in detail and
have understood and satisfied ourselves regarding the contents mainly in respect of the following.
The bid documents published by BMC;
All subsequent communications between BMC and the Joint Venture, represented by
(name of the Lead Partner in case of a Joint Venture);
The MoU signed between/among(name(s) of partners); and
The bid being submitted by(name of the Joint Venture).
We have satisfied ourselves regarding our role in the MOU. If
(name of the Joint Venture) is awarded the work/contract, we shall perform our role
as outlined in the bid documents to the best of our abilities.
The nature of our legal relationship with the Lead Partner of the Joint Venture, is specified in the
bid documents, as per the requirements stated in the bid Documents.

We undertake to support	(name of the Lead Partner, for which
the Letter of Commitment is being furnished) in r	espect of the roles as detailed in the MOU.
·	engths, our experience, and our track record as conditions specified in the bid, for the purposes of
	thip in the joint venture, in the role and form of after submission of the bid. If any change in dversely affect the same.
For and on behalf of	
Signature	
(Authorized Representative and Signatory)	
Name of the Person :	
Designation :	

Brihanmumbai Municipal Corporation (HYDRAULIC ENGINEER'S DEPARTMENT)

DEVIATION FROM SPECIFICATION & CONDITIONS OF DOCUMENT

THE TENDERER SHALL STATE ANY DEVIATION FROM THE SPECIFICATIONS, TERMS AND CONDITIONS OF DOCUMENTS CONTAIN IN THIS OFFER. IRRESPECTIVE OF REFERENCES TO DEVIATIONS MADE IN COVERING LETTER / CORRESPONDENCE / DRAWINGS / CATALOGS, THE TENDERER SHALL LIST SEPARATELY ALL DEVIATIONS IN THIS SCHEDULE. EXCEPT FOR DEVIATIONS BROUGHT OUT SPECIFICALLY IN THIS SCHEDULE, IT WILL BE COMPLETELY IN ACCORDANCE WITH THIS SPECIFICATIONS &THIS INTERPRETATION SHALL BE BINDING ON TENDERER.

Seal & Signature of the Tenderer with Rubber Stamp

PROFORMAS

PROFORMA-I

The list of similar works as stated in para 'A' of Post qualification during last seven years-

	PROFORMA- I								
Sr. No.	Name of the	Name of the	Stipulated	Actual date	Actual Cost of				
	Project/Work	employer	date of completion	of completion	work done				
1	2	3	4	5	6				

NOTE:

aScanned Attested copies of completion/performance certificates from the Engineer-in-Charge for each work should be annexed in the support of information furnished in the above proforma.

a.Works shall be grouped financial year-wise.

PROFORMA- II

Yearly turnover during the last three years.

	PROFORMA- II							
	S	Annual Turnover	Updated value to	Average of	Page			
Sr.	Financial year	of M&E Engineering			No.			
No.		Works	current year	last 3 years	INO.			
	1							
	2							
	3							
	TTotal							

NOTE: The above figures shall tally with the audited balance sheets uploaded by the bidders duly certified by Chartered Accountant.

PROFORMA-III

At least similar work, as stated in para 'A' of Post qualification,

	PROFORMA- III							
Name of the Project/ Work	Name of the Employer	Cost of the Project/ Work	Date of issue 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

	PROFORMA- IV								
Sr.	Post	Name	Qualification	Work Experience					
		(Prime Candidate /							
No.		Alternate)		No. of Years					
	Principal								
1	Technical								
	Representative								
	Project / Site								
2	Engineer or								
	Engineer								

NOTE: Scanned Attested copies of qualification certificates and details of work experience shall be submitted /uploaded.

MACHINERY: (for special work only)

PROFORMA-V

		PROFORMA- V/A	
Sr.No.	Equipment	Number	Owned/Leased/Assured access
4	2	3	4

		PROFORMA- V/B	
Sr.No.	Equipment	Number	Owned
1	2	3	4

Note: The bidder(s) shall furnish/upload the requisite Scanned Attested documents of ownership/leased of machineries. The undertaking from the suppliers will not be accepted.

PROFORMA - VI

Details of Existing Commitments and ongoing works -

	PROFORMA - VI / A								
						Value of			
Description	Place	Contract	Name &	Value of	Scheduled	work	Anticipated		
of work	No.&	Addresses	Contract	Date of	remaining	Date of			
OI WOIK		Date	of employer	in Rs.	completion	to be	completion		
						completed			
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 the support of information furnished in the above proforma.

Details of works for which bids are already uploaded -

PROFORMA - VI / B						
Description	Place	Name & Ad-	Value of	Time	Date on which	Remarks
of Work		dresses of	Contract in	Period	decision is	
		employee	Rs.		expected	
1	2	3	4	5	6	7

Note: Scanned Attested copies of certificates from the Engineer-in-charge for each work shall be annexed.

PROFORMA- VII

Information on Litigation History in which the applicant is involved.

PROFORMA - VII					
Other Party /Parties)	Employer	Cause of Dispute	Amount involved	Remarks showing Present Status.	
1	2	3	4	5	

Note: Scanned Attested copies of completion / performance certificates from the Engineer-in-charge for each work should be annexed and uploaded.

Annexure G

BRIHANMUMBAI MUNICIPAL CORPORATION

(HYDRAULIC ENGINEER'S DEPARTMENT)

UNDERTAKING FOR THE SITE VISIT

(To be submitted on the letterhead of TENDERER while uploading tender in packet A / packet B, failing which tender shall be treated as non-responsive)

Mr. (Name of paragr)		of M/o	/Nor	no of Cir	m /
l, Mr. (Name of person) Company)					at
(Address)			•		
Follows:	. 40 11010	by otate	,	arraortano	uo
say that, I have purchased the Tender for the work of ——				Hav	/ing
bid invitation No ———— for the Bri	hanmumb	ai Munic	ipal (Corporatio	n. I
Confirm that, I have visited/ inspected the site of work befor	e the subn	nission o	f the te	ender on c	late
	Considerin	g all pro	bable	difficulties	as
could be reasonably foreseen by us as an experienced of	contractor.	Thus, I	have	to submit	the
required architecture / plan & drawings of complete system	ms for site	, also I v	wish to	o execute	the
said work as per the terms and conditions of the tender. Th	is is to re-	affirm tha	at, all t	the conditi	ons
of contract shall be binding on us.					
	Pla	ıce:-			
	Da	te:-			
	(Name, Se the tender		norize	d signator	y of

Before me, (Name, Designation, Sign & stamp Of BMC Site Engineer)

Annexure-A

Irrevocable Undertaking

(on Rs.500/-Stamp Paper)

I Shri/Smt	aged,years	Indian
Inhabitant, Proprietor/Partner/Director of	M/s	
resident at	do hereby give Irr	revocable
undertaking as under;		
1) I say & undertake that as specified in	section 171 of CGST A	ct, 2017,
any reduction in rate of tax on supply	of goods or services or th	he benefit
of input tax credit shall be mandatorily	y passed on to MCGM b	by way of
commensurate reduction in prices.	1	
I further say and undertake that I under	rstand that in case the sa	ame is not
passed on and is discovered at any late		
to initiate legal action against me fo		
limited to, an appeal to the Screening C		
3) I say that above said irrevocable und		
partners/company/other Directors of the		
legal heirs, assignee, Executor, admini		,
4) If I fail to compliance with the prov		I shall be
liable for penalty/punishment or both a	is per the provisions of	GST ACL
Whatever has been stated here in above	ve is true & correct to n	ny/our owr
knowledge & belief.		
Solomniy offirmed at	DEDOMAN	T.
Solemnly affirmed at DEPONANT		
This day of	BEFORE M	ſΈ

Interpreted Explained and Identified by me.