SPECIAL CONDITIONS OF CONTRACT

PROJECT AT A GLANCE

Name of the project: Augmentation of Water Supply system for Kolhapur City from Kalamnawadi Dam as source, Kolhapur, Maharashtra

Scope of work: Design, manufacturing, Supply, Erection, Testing & Commissioning of Raw Water Pumping machinery and allied Works including Operation & Maintenance Period of 5 years

Special conditions of Contract supercedes GCC. However technical and other requirements of KMC for this work shall prevail as applicable. Bidder to indicate any exclusions.

MOU is required to be signed with the successful bidder as per requirement of KMC and shall become part of tender being submitted by EPI to KMC.

PQ Criteria

The bidder/manufacturer should have experience of design, manufacturing, supply, erection and successfully commissioning of 4 Nos. of Vertical Turbine Pumps (including HT motors) having discharge of not less than 700 Lps of each Pump having total installed capacity of minimum 1900 HP along with suspension length of column pipe assembly more than 26 meters (suspension length of Pump will be considered Below Motor Stool including Column Pipes, Bowl Assembly, Bell Mouth and Suction Strainer etc.); in last seven years under single contract within single pumping station and running satisfactorily for minimum 2 years before the date of submission of this Tender

Works Experience- The bidders should have experience of having successfully completed similar works during last 7 years ending up to 31-12-2013,. The bidder should have executed similar works comprises of all major components in India.

The bidder should have experience of successfully carried out, operation and maintenance of similar type of works in India, for minimum period of 01 (one) year prior to 31-12-2013.

1. The bidder should have not incurred loss in more than one financial year during the last three financial years, showing the soundness of the financial position of the organization and long term sustainability.

2. The Bidder/MOU partner’s contract should not have been terminated in any State Govt/Municipal Corporations/Central Govt./ Any state Govt. organization because of delay in Projects during last seven years ending on 31-12-2013.

3. The Bidder / MOU partner should not have been blacklisted in any State Govt / Municipal Corporations / Central Govt. / Any state Govt. Organization during last seven years ending on 31-12-2013.
4. All the financial documents/ statement should be signed by Chartered Accountant with income tax clearance certificate. 5. All the work experience certificates should be signed by the officer not below the rank of Executive Engineer or equivalent for the concern Government/ Semi Government Department.

6. All the above experience documents/ evidences (Technical and financial criteria) shall have Indian experience only.

Validity of offer
120 days (One Hundred and Twenty Days only) from the date of submission of tender.

The rates shall however remain firm and no escalation would be payable till the completion of works.

5.3. Mobilization Advance
5.3.1. The contractor will be entitled to receive f, mobilization advance to the maximum extent of 10% of the amount put to the tender. Mobilization advance shall be interest bearing from the date of issue of Mobilization Advance. The rate of interest charged shall be 10% per annum.
5.3.2. The mobilization advance will be paid to the contractor after signing the contract agreement and furnishing unconditional bank guarantee of 110% of the advance. The bank guarantee shall be issued by any Nationalized Bank in the prescribed format.
5.3.3. The mobilization advance shall be recovered from RA bills. The recovery of mobilization advance including the interest shall be at the rate of 15% of RA Bill till the complete mobilization advance is recovered within a time span of 1 year from the payment of first RA bill or till 50% work is completed whichever is earlier.
5.3.4. The amount of RA Bill shall be minimum of 5% of the cost put to tender. If the contractor desires to submit the RA bill less than this amount, prior permission from the Engineer-in-Charge will be necessary.

5.16. Rates to include taxes
The amounts quoted by the contractor in Price schedule shall be inclusive of all material labour, plant and equipment, royalties, taxes to be levied by central/ state governments or any public bodies and everything necessary to complete the work satisfactorily and as per the specifications. The price shall be firm and not subject to change, variations, labour conditions or any conditions whatsoever. The contractor when called for by the employer shall furnish detailed analysis in support of price quoted by him. The employer reserve the right to use the analysis supplied in settling, any deviations or claims arising out of this contract. The Contractor has to pay Local Body Tax (LBT) for the material brought on site at the rate as applicable. LBT is applicable in KMC limit. The rate shall be enquired from KMC’s LBT Department. The difference of variation in statutory taxes and duties will not be applicable. However, if new taxes are made applicable, the same will be reimbursed to Contractor after submission of proof of payment.

5.17. Central Excise Duty
required for setting of Water Treatment Plant; b) Pipes needed for delivery of water from its source to the plant (including the clear treated water reservoir, if any, thereof) and from there to the first storage point. c) Pipes of outer diameter exceeding 100mm, when such pipes are integral part of the water supply projects, are exempted from excise duty. However, necessary certificates from project Authority i.e. District Collector / Dy. Commissioner shall be obtained. The concession would be subject to the certification by the Collector / District Magistrate / Deputy Commissioner of the district in which the water treatment plant is to be set up.

The exemption from excise duty as per above GR will be applicable for this job. Contactor should quote his offer accordingly. KMC will provide all necessary documentation for claiming the excise exemption. If for any reason excise exemption is not obtained by contractor the same will not be reimbursed by KMC at any cost. Requirement of pipes and other material on which Excise duty exemption are applicable shall be worked out by contractor. The said quantity shall be certified by the KMC for getting excise duty exemption certificate from appropriate authority. However, the responsibility of getting exemption certificate entirely lies with the contractor.

5.25. General Requirements of the Contract

5.25.1. The contractor shall carry out and complete the works in every respect in accordance with this Contract and in accordance with the directions and to the satisfaction of the Engineer. The Engineer may in his absolute discretion from time to time issue further drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as 'Engineer's Instructions' in regards to:

1. The variation or modification of the design, quality or quantity of works or the omission or substitution of any work.
2. Any discrepancy in the drawings or between the Bill of Quantities and/or drawings and/or specification.
3. The removal from the site of any material brought thereon by the contractor and the substitution of any other materials there for.
4. The removal and/or re-execution of any works executed by the contractor.
5. The dismissal from the works of any persons employed thereupon.
6. The amending and making good of any defects.
7. The opening up for inspection of any work covered up.

The contractor shall forthwith comply with & duly execute any work comprised in such Engineer’s instructions provided always that instructions, directions and explanations given to the Contractor or his superintendent upon the works by the Engineer shall, if involving a variation, be confirmed in writing by the contractor within seven days and the engineer’s written approval obtained.

5.25.3. If compliance with the Engineer’s instructions as aforesaid involves work beyond that contemplated by the contractor, them unless the same were issued owing to some breach of this contract by the contractor, the employer shall pay to the contractor the prices of the said work as an extra to valued as hereinafter provided.

5.26. Extra item & Variation

5.26.1. Extra item
Items for which no rates are available in the Bill of Quantities, contractor shall inform Employer/Consultant of the same during the R.A. Bills submitted. The rate for extra items of works shall be fixed as follows:

a) The rate for individual item of work shall be considered from the latest Schedule of Rates of MJP/PWD/Irrigation, irrespective of the percentage rate quoted (against cost put to tender) by the Contractor is above or below.

b) In case if the rates are not available in the Schedule of Rates of MJP, PWD and Irrigation, then the rate for extra item will be derived from the rate of similar item or near similar item of work available, or by analysis of rates.

c) The analysis of rate shall be derived based on prevalent market rate of materials and labour involved, based on standard norms of analysis of all India Standard SOR of CPWD.

d) In case of any difference between the contractor and the Consultant as to the fixation of rates, the matter may be referred to the Engineer in Charge whose decision shall be final and binding on the contractor.

5.27. Contractor informed – as to the conditions
5.27.1. The contractor shall inspect, examine and obtain all information and satisfy himself regarding all matter and things such as right of way, surface and sub-surface water conditions to be encountered, the character of equipment and facilities needed for the execution of the work, the location and suitability of all construction materials, the quantities of various sections of the work, and local labour conditions, relating to the execution and maintenance of works to be carried out under the contract or any hindrances or interference to or with construction and maintenance of the works from any cause whatsoever including any other operation of works, which may or will be carried out or adjacent to the site of the works under the contract and shall make allowance for all such contingencies in the contract price and will not raise any claims or objections against the Employer in any of such matters as mentioned above.

5.27.2. The acceptance of the order or making of a contract will be construed as evidence that such an examination was made and later claims for labour, equipment or materials required for difficulties encountered will not be allowed.

5.27.3. Any record of sub-surface condition, water records and other observation which may have been made by the Engineer/ Employer have been made with reasonable care and accuracy. Such records may be made available to the contractor for his information if available. But there is no expressed or implied guarantee, as to neither the accuracy of the records nor any interpretation of them. The contractor shall recognize this and form his own opinion of the character of materials to be encountered or excavated, from an inspection of the ground and put his own interpretation on records.

5.27.4. The prices quoted by the contractor shall be based on his own knowledge and judgment of the conditions and hazards involved and not upon any information furnished by the Engineer / Employer.

5.28. Contractor to provide everything necessary
5.28.1. The contractor shall provide everything necessary for the proper execution of the works according to the intent and meaning of the drawings, schedule of quantities and specifications
taken together whether the same may or may not be particularly shown or described therein, provided that the same can reasonably be inferred there from, AND if the contractor finds any discrepancy therein shall immediately and in writing refer the same to the Engineer whose decision shall be final and binding on the parties.

5.28.2. The contractor shall supply, fix and maintain at his cost, during the execution of any works all the necessary centering, scaffolding, staging planking, timbering, strutting, shoring, Pumping fencing, hoarding, watching and lighting by night as well as by day, required not only for the proper execution and protection of the said works, but also for the protection of the public and the safety of any adjacent roads, streets, cellars, walls, houses, buildings and all other erections, matters or things, and the contractor shall take out and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring etc. as occasion shall required or when ordered to do so and shall fully reinstate and make good all maters and things disturbed during the execution of the works to the satisfaction of the Engineer. The Contractor shall be paid no additional amount for the above and for any access to be made to reach the construction site. The contractor shall submit design and drawing for shuttering & centering work for the scrutiny of the Consultant and approval from KMC before commencing the works.

5.28.3. All materials shall be new and of the best respective kinds described in the schedule of quantities and / or specifications and in accordance with the Engineer’s instructions and the contractor shall upon the request of the Engineer furnish him with all invoices, accounts, receipts, certificates and other vouchers, to prove that the materials comply herewith. The contractor shall at his own cost arrange for and / or carry out any test of materials which the Engineer may require.

5.28.4. It shall be the responsibility of the Contractor to unload, store in a safe and acceptable manner all construction materials and equipment in whole or part, as directed by the Engineer.

5.28.5. The contractor is required to provide and maintain all tools, and equipment and instructions necessary to perform his work. He shall provide all fuels, lubricants and compressed air for the operation and maintenance of his construction tools.

5.28.6. The contractor is to arrange for all his requirement of materials to complete the work as indicated in the specifications.

5.28.7. The contractor shall provide facilities for his office, warehouse, tool room, change room or any other building required to execute his work.

5.28.8. Samples of all material to be used, whether bricks, rubble stone, aggregate, sand, timber etc. Shall be tested in approved laboratory and submitted by the Contractor and must be got approved by the engineer before they are used. Approved samples shall be kept with the Engineer and all supplies shall strictly conform to the samples. Materials not strictly conforming to the samples are liable to be rejected.

5.28.9. The contractor shall not sell, assign, mortgage, hypothecate or remove partly or fully completed structures, equipment or materials which have been installed or which may be necessary for the completion of the contract.

5.29. Submission and approval of drawings etc.

5.29.1. The good for construction drawings will be provided by the Contractor for execution of the Civil works during the project period. Contractor shall keep the drawing in good condition and shall use the latest revision(s) if any, for execution purpose. For mechanical and Electrical Equipments and for which designs are needed to be submitted by the contractor it shall submit the same in Three sets of which will include detailed design calculations/specifications/data
sheet of equipment and shall be submitted to the KMC. Only after receiving the go ahead from KMC, the contractor with the same approved drawings and designs can use the same for further manufacturing and subsequent procurement. One set of such approved drawings/design/calculations/specifications/data sheets will be returned to the Contractor for the purpose of using in execution of work.

The structural design and drawings for all RCC structures such as Jackwell & Pump house, approach Bridge, Break Pressure Tank, WTP, Recirculation sump and pump house, staff quarters, thrust block, anchor blocks and chairs, etc. shall be prepared by the Contractor and the same shall be got approved from Govt. Engineering College, Pune or Walchand College of Engineering, Sangli. The scrutiny and other charges have to be borne by the Contractor.

5.29.2. Any additional information, further detailed calculations will have to be furnished by the contractor on demand by the Consultant/Engineer in Charge for the purpose of approval as described above.

5.29.3. The Contractor shall have to submit all the working drawings/ sketches, diagrams to be used for the work to the owner and all such drawings/ design calculations/ specifications shall have to be got checked from the Consultant who in turn will forward the same to the Engineer in charge for further process and issuing to the contractor, before starting of any work related to them.

5.29.4. Even though the drawings/ design calculations/ specifications submitted by the contractor are approved by the Engineer in Charge, such approval shall not absolve the Contractor from his duties, responsibilities and liabilities as expected for carrying out the work.

5.30. To define terms and explain plans
5.30.1. The various parts of the Contract are intended to be complementary to each other, but should any discrepancy appear, or any misunderstanding arise as to the input of anything contained therein, the explanation of the Engineer shall be final and binding.

5.30.2. Whenever, in the specifications or on the drawings which are a part of this contract or which may be furnished by the Contractor for use on this work, the terms and description of various qualities of workmanship, material, structures, processes, plant or other features of the Contract described in general terms, the meaning of fulfilment of which must depend on judgment, then in all such question of fulfilment of such specification or requirements shall be decided by the Engineer and said materials shall be furnished, said work shall be done, and said structures, Process, plant or feature shall be constructed, furnished or carried on in full and complete in accordance with, his interpretation of the same and to Engineer’s full satisfaction and approval, provided such interpretation is not in direct conflict with the drawings and specifications and generally as per accepted good engineering practice.

5.30.3. Matter shown either on the drawings or in the specifications shall be done and furnished as it shown in both except where expressly excepted either in the specifications or on the drawings, figured dimensions shall in all cases be taken in preference to scaled dimensions or measurements and detailed drawings consistent with general drawings in preference to general drawings of the same part of the work.

5.31. Water, Electricity and other facilities
Contractor shall have to make, his own arrangement for supply of water and electricity from various agencies or from his sources for the execution of work. No water, power etc shall be provided by KMC during execution of work.

5.32. **Engineer to direct work and order alternations, modifications, deletions**

5.32.1. The Engineer shall have the right to direct the manner in which all work under this contract shall be conducted in so far as may be necessary to secure the safe and proper progress and the specified quality of the work, and all work shall be done and all material shall be furnished to the satisfaction and approval of the Engineer.

5.32.2. Additional drawings and explanations to exhibit or illustrate details may be provided by the contractor. The written decision of the Engineer as to the true construction and meaning of the drawings and explanations shall be binding upon the contractor.

5.32.3. If at any time the contractor’s method, materials or equipment appear to the Engineer to be unsafe, insufficient or inadequate for securing the safety of the workmen or the public, the quality or work or the rate of progress required, he may order the contractor to increase their safety, efficiency and adequacy, and the contractor shall comply with such orders. If at any time the contractor’s working force and equipment are, in the opinion of the Engineer inadequate for securing the necessary progress, as herein stipulated, the contractor shall, if so directed, increase the working force and equipment to such an extent as to give reasonable assurance of compliance with the schedule of completion. The failure of the Engineer to make such demands shall not relieve the contractor of his obligations to secure the quality, the safe conducting of the work and the rate of progress required by the contract, and the contractor alone shall be and remain liable and responsible for the safety, efficiency, and adequacy of his methods, materials, working force, equipment and timely completion of job irrespective of whether or not he makes any change as a result of any order or orders received from the Engineer.

5.32.4. The Employer/ Engineer shall have the power to make any alternations in, omissions from, additions to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall bound to carry out the work in accordance with any instructions that may be given to him in writing by the Employer/ Engineer and such alternations, omissions, additions or substitutions shall not invalidate the contract. Any altered, additional or substituted work which the contractor may be directed to do in the manner above specified as the work, shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work and the similar rates as are specified in the tender for the main work, unless such alternations are not similar to or derivable from the items of work and form extra items.

5.32.5. The time for completion of the work shall be extended in the time proportion that the altered, additional or substituted work bears to the original contract and the decision of the Employer shall be conclusive and binding on the contractor.

5.33. **Contractor’s Supervision**

5.33.1. The contractor shall, during the whole time the work is in progress, employ the qualified personnel as stated in the Clause 9.1, in Volume 1, to be in charge of the works with adequate experience in handling of jobs of this nature and with the prior approval of the Employer/ Engineer. The personnel shall be constantly in attendance at the site during working hours. During Contractor’s absence during working hours, if unavoidable, and also beyond working
hours, when it may be necessary to give directions, orders may be given by the Consultant/Engineer in Charge/ Employer and shall be received and obeyed by the contractor’s personnel or even supervisor who may have charge of the particular part of the work in reference to which orders are given. If requested to do so, the Consultant/Engineer/Employer shall confirm such orders in writing. Any direction, instructions or notices given by the consultant/Engineers/Employers to him, shall be deemed to have been given to the contractor. The required powers and authority shall be given to the contractor’s representative (Personnel) by the contractor so as to engage labour or purchase materials and proceed with the work as required for speedy execution.

5.33.2. The Contractor shall deploy minimum engineering staff as stipulated in clause 9.1 (Personnel Capabilities). If the minimum staff as stipulated is not deployed by the contractor, the employer will be at liberty to deploy such engineering staff at the risk and cost of the contractor and the contractor will have to borne all the cost of such deployment.

5.33.3. None of the Contractor’s personnel’s, supervisors or labour should be withdrawn from the work without due notice being given by the Consultant/Employer / Engineer, further no such withdrawals shall be made from the work when in the opinion of the Consultant/employer/ engineer such withdrawals will jeopardize the required pace of progress/ successful completion of the work.

5.33.4. The contractor shall employ in or about execution of the works only such persons as are careful, skilled and experienced in their respective trades. The employer shall be at liberty to object to and require the contractor to remove any persons employed by the contractor, in or about execution of works who in the opinion of the employer/ engineer misconducts himself or is incompetent or negligent in the proper performance of his duties and all such persons shall not be employed upon the works without prior permission of the employer.

5.33.5. Neither the contractor, the owner nor the engineer shall hire or employ any employee of the other party without mutual consent.

5.35. Access
5.35.1. The Engineer, his representatives and the employer shall at all reasonable times have free access to the works and / or to the workshops, factories or other place where materials are being prepared or constructed for the contract and also to any place where the material are laying or from which they are being obtained the contractor shall give every necessary facility to the Engineer and his representatives for inspection and examination and test of the materials and workmanship even to the extent of discontinuing portions of the work temporarily or of uncovering or taking down portions of finished work.

5.35.2. If any work is to be done at place other than the site of the works, the Contractor shall obtain the written permission of the Engineer for doing so.

5.37. Construction Supervision and Workmanship
5.37.1. The Engineer in Charge/Consultant will engage his own supervisory staff of works as may be deemed fit. The Contractor shall afford the supervisor every facility and assistance for examining the works and materials for checking and measuring the works and materials. The supervisors shall have no power to revoke, alter, enlarge or relax any requirement of the Contractor, but may sanction only day work, additions, deviations or omissions, or any extra work whatever as may be authorized by the Engineer.
5.37.2. The supervisors will act as representatives of the Employer and shall have the power to give notice to the Contractor or to his Foreman of non-approval of any work or materials, and such work shall be suspended or the use of such material shall be discontinued, until the decision of the Engineer is obtained.

5.37.3. The work shall be conducted under the general direction of the Engineer and is subject to inspection by his supervisors to ensure strict compliance with the terms of the Contract. No failure of the Engineer or his supervisors during the progress of the work to discover or to reject materials, or work not in accordance with the requirement of this Contract, shall be deemed as acceptance thereof or a waiver of defects therein and shall be considered to be an acceptance of the work or materials which are not strictly in accordance with the requirements of this Contract. No changes whatsoever to any provision of the specifications shall be made without written authorization of the Employer.

5.37.4. The Contractor shall execute the whole and every part of the work in the most substantial and workman like manner as regards material and in all other respects.

5.37.5. The provisional acceptance of sections of the work shall not be considered so as to prevent the Engineer from requiring replacement of defective work that may become apparent after the said provisional acceptance and shall not be constructed in any way on the basis for a claim of extra compensation for any cause whatsoever by the Contractor.

5.38. To remedy defective work and defects liability period.

5.38.1. If the work or any portion thereof shall be damaged in any way excepting by the acts of the Employer, or if defects not readily detected by proper inspection shall develop before the final completion and acceptance of the whole work, the contractor shall forthwith make good, without compensation, such damages or defects in a manner satisfactory to the Engineer/Employer. In no case shall defective or imperfect work be retained.

5.38.2. First twenty four months period out of sixty calendar months period of O&M from the date of successful completion of performance / trial run period of three months of the plant, unless otherwise agreed in writing by the Employer/Engineer will be deemed as the “Defects Liability Period”. In case any defects in the work due to wrong assumptions in designs, bad materials and / or bad workmanship developed in the work before the expiry of this period, the Contractor on notification by the Employer shall rectify or remedy the defects at his own Cost and he shall make his own arrangements to provide material, labour, equipment and any other appliances required in this regard. In case even on due notification by the Employer, the Contractor fails to rectify or remedy the defects, the Employer shall have the right to get this done by other agencies and recover the cost incurred, by deductions from any money due or that may become due to Contractor.

5.38.3. The Employer may in lieu of such amending and making good by the Contractor, deduct from any money due to the Contractor a sum to be determined by the Employer equivalent to the cost of amending such work and in the event of such due payment becoming insufficient, recover the balance from the Contractor together with any expenses to the Employer may have incurred in connection with such recovery.

5.38.4. The Contractor shall remain liable under the provisions of this clause notwithstanding the passing by the Employer of any certificate, final or otherwise or the passing of any accounts.

5.38.5. The Contractor shall see that the excavated material or debris from the work under the contract shall be placed at a place and in a manner, as designated by the Engineer and he shall
remove it from time to time as required by the Engineer so that their shall not be any, 
interference or obstruction to the employers or other Contractors work in the adjacent areas.

5.39. Night work - Holiday working – Permission
5.39.1. The contractor is normally to work during daytime only and is required to complete the 
work in all respects as stipulated in the tender documents. However, night work or holiday work 
may be permitted in exigencies with prior approval of the Engineer in Charge.

5.39.2. Sufficient light shall be provided to safe guard the workers and the public and to afford 
adequate facilities for proper placing and inspecting the material when the night work is in 
progress.

5.40. Daily diary & progress report
5.40.1. A daily diary register will be kept in the supervisor's office. The contractor will supply all 
detailed information every day at nine hours for the day preceding and diary will be jointly 
signed by the site supervisor and Contractor’s representatives, everyday in token of its 
correctness.

5.40.2. A works instruction book, serially numbered will also be kept in the site supervisors’ 
office and all day- to- day instructions will be given in that book. The Contractors’ representative 
shall report everyday to see these instructions and sign them at the bottom in token of his 
having seen them.

5.40.3. The Contractor shall supply all information regarding procurement of materials and 
progress of construction work, as is required by the Engineer/ Owner for compiling the progress 
reports. The Contractor shall provide a weekly plan for the execution of the work for coming 
week.

5.41. Contractor to remove all offensive matter and cleanup.
5.41.1. All soil, filth or other matter of an offensive nature taken out of any excavation, trench, 
sewer, 
drain, cesspool or other place shall be carried away by the Contractor to some pit or place 
provided by him away from the site or work and approved by local authorities.
5.41.2. As a part of the work included in this contract, the contractor shall completely remove 
and 
satisfactorily dispose of all temporary buildings, shall remove or grade, to the extent directed, all 
embankments or coffer dams made for construction purposes, shall satisfactorily fill 
excavations as directed, shall remove all plant and equipment, shall satisfactorily dispose off all 
rubbish resulting from the operations under this contract and shall do all work necessary to 
restore the territory embraced with the site conditions to at least as good order and conditions 
at the beginning of the work under this contract.

5.42. Safety Precautions
5.42.1. The Contractor shall pay particular attention to ensure safety of his staff and workmen 
and others in the vicinity and shall be responsible for any loss of life or injury to persons due to 
negligence or any other causes whatever except natural causes. He shall provide all necessary 
fencing and lights required to prevent accidents and shall be bound to bear the expenses of 
defense of every suit, action or other proceedings at law that may be brought by any person for 
injury sustained owing to neglect of the above precautions and to pay any damages and costs 
which may with consent of the Contractor be paid to compromise any claim of any such person.
5.42.2. The Contractor shall reinstate all damage of every part mentioned in this clause so as to deliver the whole of the contract work complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

5.42.3. The Contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, guards, sign boards, temporary passages, or other protection necessary for the purpose. All work shall be done at the Contractor's risk and at any loss or damage free from all expenses to the Employer. The contractor shall be responsible for any loss or damage to material, tools or other articles used or held for use in connection with work. The work shall be carried on to completion without damage to any work or property of the Employer or of others and without interference with the operation of existing machinery or equipment.

5.42.4. The use of explosive in manner, which might disturb or endanger the stability, safety, or quality of the works, will not be allowed. Explosives shall be stored, handled and used as prescribed by the law and regulation of the Indian Union, the state in which the work is performed and subdivisions thereof. Special attention must be given to immediate disposal of paper wrappings from explosives, which are poisonous to livestock.

5.42.5. All the documents regarding safety aspects should be made available to the Employer at any time during the progress of the work.

5.42.6. All safety requirements as per the various applicable laws shall be strictly complied with. If the safety requirements are found to be not adhered to, this will be enough cause for the breach of contract and the contract may be terminated.

5.43. Fair wages
5.43.1. The contractor shall comply with all industrial and labour rules and regulations, which are in force from time to time. The Contractor has to follow strictly the government labour acts that are in force at present and at all future times and all necessary arrangements for labour will have to be made by the Contractor.

5.43.2. No labour below the age of eighteen years shall be employed in the work.

5.43.3. The Contractor shall pay not less than fair wage to labour engaged by him on the work. "Fair wage means wage whether for time or piece work notified at the time of inviting tenders for the work and where such wages have not been done so notified, the wages prescribed by the Central Public Works Department for the district in which the work is done and it shall not be less than the minimum rates of wages fixed by the Government (Central or State) for that class of employees engaged on the same type of work in the same area.

5.43.4. The Contractor shall notwithstanding the provisions of any Contract to the contrary cause to be paid a fare wage to labours indirectly engaged on the work including any labour engaged by his Sub-connectors in connection with the said work, as if the labourers had been immediately employed by him.

5.43.5. In respect of all labours directly or indirectly employed in the works for the performance of the Contractor's part of this agreement, the contractor shall comply with or cause to be complied with C.P.W.D. Contractor's Labour regulations made by the Government from time to time in regard to payment of wages, wage period, deductions from wages, recovery of wages
not paid, any deductions from wages, recovery of wages not paid, any deductions unauthorized
made maintenance of wage register, wage cards, publication of scale of wages, leave, maternity
benefit and other terms of employment, inspection and submission of periodical returns and all
other matters of alike nature to the Employer / Engineer and / or to the Labour Welfare Officer or
any other person Authorized by the Government.

5.43.6. The Employer shall have the right to deduct from the money due to the contractor, any
sum required or estimated to be required for making good the loss suffered by a worker or
workers by reason of non-payment of wages of deductions made from his or their wages which
are not justified by their terms of the Contract or non-observation of regulations.

5.43.7. The Contractor shall at his own expense provide or arrange for protective clothes and
equipment like helmets, safety belts gumboots, welding goggles etc. for his labours /
employees engaged in trades which may be injurious to their health unless proper precautions
are taken.

5.43.8. If all the safety norms are not provided, it will be enough cause for breach of Contract &
Contract shall be terminated.

5.44. Camps and sanitary conveniences
5.44.1. The responsibility for providing any accommodation, feeding and sanitary necessities for
the men employed by the contractor shall be that of the contractor exclusively and such facilities
shall be provided outside the premises of the employer.

5.44.2. The contractor shall not put up any unauthorized hutments, canteens or teashops on the
employer's property. These, if any, shall be with the knowledge and prior approval of the
Engineer in writing.

5.44.3. It shall be very clearly understood that the contractor shall not put up any structure for
housing his labour or his supervisory staff on the Employer’s land without the specific prior
consent of the Employer.

5.44.4. The contractor shall provide adequate supply of water for the use of labourers. The
provisions shall not be less than 10 liters of potable and wholesome water per head per day for
drinking purpose and 100 liters of clean water per head per day for flushing and washing
purposes.

5.44.5. The contractor shall make necessary arrangements for the treatment of sewage by
providing septic tanks. He shall also provide efficient arrangement for draining away sullage
water so as to keep the camp neat and tidy. All charges on these accounts shall be borne by the
Contractor.

5.44.6. The contractor shall make arrangement for conservancy and sanitation in the labour
camps according to the rules of the local public health and medical authorities and shall
generally follow the requirements of “Model Rules for the Protection of Health and Sanitary
Arrangements for Workers employed by C.P.W.D. or its Contractors.

5.45. Intoxicants
The Contractor shall not permit use of intoxicating liquor upon the works embraced in this
Contract, or upon any of the ground occupied or controlled by him under this Contract.
5.46. Identification badges
5.46.1. The Contractor shall provide each of these employees including labour, with identification badge, at his cost. The colour & design of these badges shall subject to the approval of the Employer. The employees shall display the badges on their person so that the badges are clearly visible for easy checking by gateman as they enter the premises of the Employer. The badges shall be serially numbered. The Contractor’s initials shall be printed with the number on the badge.
5.46.2. The Contractor should immediately notify to the Employer if any, if the badges are lost and a new one issued in its place, or when badges are carried away by discharged labour. No employees of the contractor, without a badge will be permitted to enter the premises of work, except in such cases, where special permission of the Employer or the Engineer is obtained.

5.47. Force Majeure
Force Majeure is herein is defined as (1) any clause which is beyond the control of the contractor or the Employer, as the case may be, (2) natural phenomenon like flood, draught, earthquakes and epidemics notified by the Government, (3) act of any Government authority, domestic or foreign, like war, declared or undeclared, government priorities, quarantine, embargoes, licensing control or production or distribution restrictions, (4) accidents and disruptions like fire and explosions. (5) transport problems due to force majeure or accidents, (6) strikes, slowdowns, lockouts and sabotage by the persons other than those under control of the contractor, (7) riots and civil commotion. (8) failure or delay in contractors / Employers source of supply due to force majeure causes enumerated at 1 to 7 above.

5.48. Work in monsoon and dewatering
5.48.1. The construction and erection work may entail working in monsoon also. The contractor must maintain labour force as may required for the job and plan execute the construction and erection according to the prescribed schedule. No extra working period or payment will be considered for such work in monsoon.

5.48.2. During monsoon and other period it shall be the responsibility of the contractor to keep the construction site free from accumulation of water at his own cost.

Third Party Inspection
For the supply of materials such as pipes, valves, Electro Mechanical items, third party Inspection should be carried out from SGS / RITES or similar firms approved by KMC. It is binding on the contractor to bear the expenditure towards this.

O&M period of 5 years

5.49. Roll of pumping machinery manufacturer
All prices shall be quoted in Indian Rupees only and payment will be made in Indian Rupees. The pumping machinery manufacturer shall regularly visit at construction site at least once in two months and assure that the work is going on as per the manufacturer's instructions during execution, test and trial and O&M period. However the pumping machinery manufacturer shall be available as and when required by the client with an advance notice of 24 hrs. The pumping machinery manufacturer shall be responsible jointly with successful bidder for achieving the end result as per the tender requirements. The successful bidder shall submit an undertaking of joint responsibility duly signed by the bidder and pumping machinery manufacturer up to the end of O&M period. Pumping machinery manufacture shall provide all technical assistance needed.
during erection, commissioning, performance testing and trial run for pumping machinery to achieve the quality and quantity standards as per tender requirements.

Upon completion of the work and prior to commencement of performance run/ test and trial, the pumping machinery manufacturer shall visit the site and check the complete work as executed by the bidder and certify for “Go ahead” for the test and trial. For any break down observed during the test and trial period, the pumping machinery manufacturer shall arrange to rectify/repair the same with in shortest time span.

Pumping machinery manufacturer shall provide all technical assistance needed during O&M period to maintain the quality and quantity parameters as per tender requirements. The bidder and pumping machinery manufacturer shall be jointly responsible for preparation and submission of operation and maintenance manual before commencement of test and trial period.

The pumping machinery manufacturer should have active participation in training modules to be imparted to the client’s personnel.

**SCHEDULE OF LIQUIDATED DAMAGES**

**Delay:**
Compensation for delay and limit of compensation for delay shall be as follow: -
Compensation for delay shall be calculated at the rate of Rs. 2,00,000/- per day. The limit of compensation shall be 10% (Ten percent) of the total cost put to tender inclusive of capital and O & M cost as given in the schedule.

In case the contractor completes the total job within the stipulated time limit of 30 months including test and trial period of three months, or extension given by the department not because of contractor’s fault, the penalty shall not be imposed.

**Limitation to the Penalties**
The contractor’s aggregate liability to pay the penalties for failure to meet the above will not exceed 10% of the total contract amount inclusive of capital and O & M cost as given in the price schedule.

**Progress Monitoring**

<table>
<thead>
<tr>
<th>Time elapsed since Date of award in months (including monsoon)</th>
<th>Required progress to be achieved in percentage</th>
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</thead>
<tbody>
<tr>
<td>12</td>
<td>Approval of Design, QAP and Manufacturing</td>
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<tr>
<td>20</td>
<td>Supply, Erection</td>
</tr>
<tr>
<td>24</td>
<td>Testing &amp; Commissioning</td>
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<tr>
<td>30.0</td>
<td>Test and trial complete</td>
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**Payment Terms**

**Electro Mechanical Items of work**

<table>
<thead>
<tr>
<th>Electro Mechanical Works</th>
<th>Payments in %</th>
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<tbody>
<tr>
<td>Supply/procurement of material</td>
<td>70%</td>
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<tr>
<td>Activity</td>
<td>Percentage</td>
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<tr>
<td>----------------------------------------------</td>
<td>------------</td>
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<tr>
<td>Erection complete</td>
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<tr>
<td>Testing and Commissioning</td>
<td>10%</td>
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<tr>
<td>Test and trial for 3 Months complete</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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