

| <u>TENDER FOR DESIGN, INSTALLATION AND COMMISSIONING OF SEWAGE</u> | | | |
|---|-------------------------------------|----------------|-----------|
| <u>TREATMENT PLANT ON TURNKEY BASIS AT BMS INSTITUTE</u> | | | |
| <u>OF TECHNOLOGY, BANGALORE.</u> | | | |
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(2) Press Notice

Sealed tenders are invited from reputed agencies experienced in Sewage Treatment Plant works for "Design and Execution of STP of 225 Cum / day capacity at BMSIT, Avalahalli, Yelahanka, Bangalore-64" on a " **TURNKEY BASIS** "

Tender documents can be down loaded from the web site.....

Tenders duly filled, signed, and sealed are to be submitted to the office of B.M.S Institute of Technology, Avalahalli, Yelahanka, Bangalore 64, on 12/01/09 before 3 PM along with a non-refundable fee of Rs.1000.00 in the form of DD in favour of M/s.Karekar & Associates, Bangalore payable in Bangalore.

The B.M.S Institute of Technology/Architects reserves the right to accept or reject any or all bids without assigning any reason whatsoever.

Sd/Chairman

(3) TENDER INSTRUCTIONS FOR EXECUTION ON TURNKEY BASIS**Name of Work : Design, installation and commissioning of a Sewage treatment Plant of 225 Cum/Day capacity at BMS Institute of Technology, Bangalore .**

The B.M.S Institute of Technology invites sealed competitive bids in two cover system from agencies, who have successfully commissioned a minimum of 3 projects of similar nature in last 5 years, for the design, installation and commissioning of a sewage treatment plant of 225 Cum/Day capacity.

Last Date for receipt of bids : 3.00 P.M. on 12/01/2009.

Scope of Service

The B.M.S Institute of Technology has decided to get the job executed on turn key basis including the design and execution, which shall include all Civil and electrical works and mechanical parts.

The main components of services are.

a. The design of the plant should be eco friendly. Only natural growth of micro organism which feed on the effluent and air is essential as the basic requirement. Use of chemicals should be restricted to the bare minimum.

b. It is preferable that no parts of the plant should be visible above ground level, so that the area above can be utilized for other purposes.

c. A neat and clean environment may be maintained around the plant.

d. It shall ensure simple operation with minimum maintenance cost.

e. Furnish detailed design, drawings and specification of the plant.

f. Furnish a guarantee for 10 years and maintain the plant for a period of two years from the date of virtual completion. The rate should include this cost. During this period the effluent should meet the assured quality parameters when tested in a reputed lab of management 's choice.

g. The total completion period shall be 4 months.

Tender documents can be down loaded from the web site: Tenders duly filled, signed and sealed are to be submitted to the office of B.M.S. Institute of Technology, Avalahalli, Yelahanka, Bangalore 64 on 12/01/09 before 3 PM along with a non-refundable fee of Rs.1000.00 in the form of DD in favour of M/s. Karekar & Associates, Bangalore payable in Bangalore..

Earnest Money deposit of **1% of quoted amount** shall also be furnished in the form of a demand draft drawn in favour of " The Principal, B.M.S Institute of Technology, Avalahalli, Yelahanka, Bangalore-64 as per the tender instruction.

Sealed tenders must be delivered by super scribing the name of work "Tender for the design, installation and commissioning of Sewage Treatment Plant at B.M.S Institute of technology Bangalore-64" to BMSIT Bangalore, on or before 3.00 P.M. on 12/01/09. The super scribed main cover should contain 2 covers namely Cover I & II.

Cover I should contain pre qualification documents such as certificates from previous clients, detailed technical design, drawings and specifications and DD for E.M.D.

Cover II should contain the price bid quoting detailed quantities and amount including all costs, taxes, civil & electrical works, cost of mechanical parts etc. with break up details.

Cover I will be opened at 4.00 P.M on same day. Evaluation of technical bids will be done in the manner specified in the detailed Notice Inviting Tenders. Cover II containing the Price bid of those who are qualified only will be opened on a convenient date and time after giving due intimation.

The B.M.S Institute of Technology reserves the right to accept or reject any or all bids without assigning any reason whatsoever.

(4) NOTICE INVITING TENDER

1. Sealed lumpsum tenders for the turnkey project of Design, Installation and Commissioning of Sewage Treatment plant at BMSIT Bangalore (225Cum/Day capacity) are invited by “The Principal, B.M.S Institute of Technology, Bangalore-64” (herein referred as OWNER) from agencies, who have successfully commissioned a minimum of 3 projects of similar nature in last 5 years.

This is a lumpsum contract and no extra deviated items will be entertained. Hence tenderers shall study the site conditions in details and quote their rates covering all items required to meet the desired parameters of the effluent.

2(a). Tenderers are strongly advised to go thorough all the documents in connection with this contract very carefully. The tender document can be down loaded from the web site :
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(b) Tenders duly filled, signed and sealed are to be submitted to the office of B.M.S Institute of Technology, Avalahalli, Yelahanka, Bangalore 64, on 12/01/09 before 3 PM along with a non-refoundable fee of Rs.1000.00 in the form of DD in favour of M/s. Karekar & Associates, Bangalore payable in Bangalore. Any tender received after the due time will be rejected. Tenderers will deposit a sealed superscribed envelope containing two covers of which the **Cover I** will contain the following.

1. Earnest Money deposit as specified
2. Letter accompanying the tender with any commercial / technical conditions other than those stipulated in the tender.
3. Complete explanatory note on the concept and details of design including certification from reputed Environmental Engineer.
4. Complete set of Layouts and detailed drawings.
5. Tender book for the project duly filled up and signed on all pages.
6. Attested copies of certificates of experience from clients.
7. Last three year balance sheet, IT returns and IT clearance certificate and PAN No

Cover No. II will contain the priced tender book giving the lumpsum for the complete turnkey job, including all costs, taxes, Civil & electrical works cost of mechanical parts etc. with break up details.

(c) Cover II will be opened after technical evaluation, date of the opening will be intimated.

(d) Subject to the owners (“Director, B.M.S Institute of Technology”) right to accept any tender and to reject any or all tenders; the owner will award the contract to the tenderer whose bid has been determined to contain acceptable design and reasonable cost as explaine in Para (c) above.

(e) Before commencing the work and within a period of 20 days after the letter of acceptance of the bid has been intimated to him, the tenderer shall make a security deposit as given in the Clause 6 B of this notice and furnish the same for the proper fulfillment of the contract and shall execute an agreement for the work in required non-judicial stamp paper in the format given as "Articles of Agreement".

Bids will be rejected if agreement is not executed within 30 days from the date of letter of acceptance and the work will be awarded to the next bidder as laid down in code rules. The EMD of the defaulted tenderer will be forfeited and penal action will be taken against the defaulted bidder.

3. Tenders not properly filled, mutilated with incorrect calculations or generally not complying with the conditions shall be rejected.

4. In case of the ceiling lumpsum and break up for each component the bidders should quote their rates both in figures and in words. The break up must contain all required items required to complete the job based on the design and drawing presented by the bidder. The final lumpsum amount will be decided based on the cost worked for all the components done per this schedule and cost of authorised extra items added to it. But in no case the ceiling lumpsum will be exceeded unless there are approved variations from the side of the owner.

5. If the bid is made by an individual it shall be signed with his full name and his complete address shall be given. If it is made by partnership firm it shall be signed with the co-partnership name by a member of the firm who shall sign his own name and give the name of address of each partner of the firm and attach a copy of "Power of Attorney" with the tender authorizing him to sign on behalf of the other partners. A certified copy of the 'Registered Partnership Deed' shall also be submitted along with the tender. In case the tender is made by or on behalf of a company incorporated under the Companies Act 1956, it shall be signed by the Managing Director, or by one of the Directors duly authorised on this behalf and shall include a copy of the 'Power of Attorney' with the tender. A certified copy of the registered deed shall also be submitted along with the tender in Cover No. I.

6. EMD / SECURITY DEPOSIT / RETENTION MONEY

A. E.M.D

Earnest Money Deposit of 1% of quoted amount in the form of crossed demand draft in favour of "The Principal, B.M.S Institute of Technology, Avalahalli, Yelahanka, Bangalore-64 payable at Bangalore to be submitted.

EMD of the unsuccessful tenderers will be refunded without any interest within 90 days from the date of submission of the tenders.

EMD will be forfeited :

- (i) If a bidder withdraws his bids during the period of validity specified.
- (ii) If the successful bidder fails within the time to sign the contract document or fails to furnish the required security deposit.

B. SECURITY DEPOSIT :

EMD of the successful tender will be with be retained as Security Deposit and will be refunded to the contractor after the virtual completion of the work.

C. RETENTION AMOUNT :

Retention Money at the rate of 5% (Five Percent) of value of work done for each running bill will be deducted.

The same will be refunded after the completion of the Defects liability period.

All the deposits of EMD, Security Deposit and Retention Money will not bear any interest whatsoever.

D. Income tax at the rate prevailing at the time of payment will be deducted from each running bill and final bill.

E. All statutory payment in connection with the employment of the Workmen for this work will be borne by the Bidder / Contractor.

The Bidder / Contractor is the employer of all the workers engaged for this work and should therefore take all required registrations and pay premiums correctly to labour welfare funds as constituted from time to time.

7. PERIOD OF VALIDITY

The tender shall remain valid for acceptance for a period of 90 days from the date of submission of the tenders. If any tenderer withdraws his tender before the said period or makes any modifications in terms and conditions of the tender, then the "Director, B.M.S Institute of Technology, Bangalore" has the liberty to forfeit the said Earnest Money Deposit.

8. INSPECTION OF SITE

Every tenderer is expected to inspect the site of the proposed work and acquaint himself with the present water bodies, site conditions, approaches, availability of raw materials, geological and weather conditions etc. before quoting his rates for the design and execution.

9. ALL INCLUSIVE RATES

The Bidder's lumpsum ceiling cost must be firm and include the cost of transportation of materials to the site, ALL APPLICABLE TAXES & DUTIES and the fixing or placing in position for which the item of work is intended to operate. The rates quoted by the Bidder/Contractor shall be firm throughout the contract period and there shall be no upward revision of the ceiling lumpsum or rates quoted by the Bidder/Contractor for any reason whatsoever. It should be clearly understood that any claim for extra TAXES & DUTIES etc. shall not be entertained in any case whatsoever once the tenders are opened. The lumpsum cost should include one year maintenance charges including cost of all materials and labour.

10. Matters not covered by the specifications given in the contract, as a whole shall be covered by the relevant Indian Codes. If such codes on a particular subject have not been framed, the decision of the Consultant shall be final.

11. No alteration shall be made by the bidder/tenderer in the Notice Inviting Tenders, Instructions to the Contractors, Contract Form, Conditions of the contract, and if any such alterations are to be made the same should be given in the covering letter in Cover No. I.

12. The acceptance of a bid shall rest with the Director B.M.S Institute of Technology which does not bind itself to accept the lowest tender and reserves to itself the authority to reject any or all tenders received without assigning any reasons whatsoever.

13. The "Director, B.M.S Institute of Technology" has the right to ask for an alternative design in case the accepted design cannot suit the site conditions.

14. The work shall be carried out under the direction and supervision of the Consultant/"Director, B.M.S Institute of Technology" or their representative at site. On acceptance of the tender, the Bidder/Contractor shall intimate the name of his accredited representative who would be supervising the construction and would be responsible for taking instruction for carrying out the work.

15. The Consultants/"Director, B.M.S Institute of technology" decision with regard to quality of the material and workmanship will be final and binding, any material rejected by the Consultant/"Director, B.M.S Institute of technology" shall be immediately removed by the Bidder / Contractor.

16. SUB – LETTING

No part of the contract shall be sublet without the written permission of the "Director, B.M.S Institute of Technology" nor shall transfers be made by the "Power of Attorney" authorising others to carry out the work or receive payment on behalf of the tenderer.

17. DEFECTS LIABILITY PERIOD

Any defect developed within 'Defect Liability Period' of Twenty four months will have to be rectified by the Bidder / Contractors at their own cost and in case the defects are not rectified by the bidder, the Consultant or Director, or their representatives shall get the work done at the risk and cost of the Bidder/Contractor. The bidder shall maintain the plant for two year. In addition the bidder has to give guarantee for the performance for 10 yrs for which he has to execute a performance guarantee bond.

18. DELAYS IN COMMENCEMENT

The Bidder/Contractor shall not be entitled to any compensations for any loss suffered by him on accounts of delays in commencing or executing the works, whatever the cause for such delays may be including delays in procuring Govt. controlled or other materials.

19. PERIOD OF CONSTRUCTION

Time is deemed to be the essence of this contract. The total time for design and execution shall be 4 months (120 days). Commencement of the work shall be considered from the 7th day on receipt of letter of acceptance. The contractor shall draw a detailed schedule of programme on whole work, within one week of award of work and submit to Architect, for their approval.

20. LIQUIDATED DAMAGES:

Employer shall levy liquidate damage at the rate of 0.5% (half) of the total contract value per week of delay, Upto a maximum of 4.5% (four and half) of the total contract value after which the contract shall be stand cancelled.

21. BIDDER / CONTRACTOR'S STORE AND SITE OFFICE

Suitable area near the site of work shall be allowed to the bidder / contractor free of cost for storing his tools and plants, materials and for his site office. However, the structure will be provided by him at his own expense and he will be solely responsible for guarding his property and shall cover his property with requisite insurance against theft, fire etc. the contractor however will have to dismantle the sheds and vacate the land of all debris etc. at his own expense after completion of work.

22. APPROVALS FROM STATUTORY BODIES

It will be the responsibility of the Bidder/Contractor to obtain approvals and NOC's from Local Bodies Pollution Control Board and other Govt. Departments etc. for carrying out this work and for Commissioning. All charges to be remitted will however be reimbursed by the Department.

23. MEASUREMENT AND BILLING

Wherever mode of measurement is specified, the measurement will be taken at site as per the latest IS code of practice for measurement.

Contractor has to submit running and final bills along with measurements book at all completed items. Measurements of all foundation works and hidden items shall be got checked by Architect/ Employer before closing/ filling is done. The contract or his representatives shall accompany the Architect/ Employer or their representative in checking the measurements and shall agree to the measurements taken on spot. All necessary tapes shall be of steel and shall be supplied by the contractor. The contractor shall then present his bill based upon the agreed and recorded measurements and as per the directions of the Architect. If the contractor fails to accompany the Architect/ Employer for measurements, then he shall be bound by the measurements taken by the Architect/ Employer.

The Contractor shall raise bill once a month or for a minimum payment of Rs. 5,00,000/- Payment towards materials (non-perishable) brought to site for unfinished items shall be paid at 75% of basic cost on recommendation of Architect. Period of final measurement shall be one month from the time or completion of the project.

24. EXTRA ITEMS

Rates for extras items or additional, altered or substituted work as may be ordered by the management shall be determined by the Architect/ Employer as follows:

1. If already specified he shall carryout at the same rate.
2. If not specified, the rate for the nearest similar item from the current SR to which the tender percentage will be added.
3. At the actual expenditure incurred in execution of the item inclusive of all applicable taxes, etc., plus 15% for contractor's profit and overhead. The actual expenditure will have basis of materials and labour as per the CPWD Rate Analysis/KPWD Rate Analysis/Architect Rate Analysis which ever is applicable.

25. WATER & ELECTRICITY

Water for construction if required shall be supplied at any one place/ point near the construction site storage, hose pipe, pumps etc required shall be arranged by the contractor. One percent (1%) of the value of all cement items shall be recovered towards water supplied. Contractor has to make arrangements to draw electric lines from the temporary power supply energy meter for recording the consumption. This cost of power consumption will be recovered from the payment made to the contractor at the tariff as per the electricity Board.

(5) CONDITIONS OF CONTRACT

SPECIAL CONDITIONS OF CONTRACT

PREAMBLE

1. GENERAL:

a. This tender is called on “Turnkey” basis. The scope of work and specifications for each items are described in the “TECHNICAL SPECIFICATIONS”. The Tenderer has to carryout all the works required to complete the treatment Plant in all respects and operating the plant for an initial period of twelve months and give performance trails. Major items of the total work are identified and given in price Schedule. Tenderer has to understand well all the associated works and include the prices in that item it. No extra shall be paid on any account. Any item which is not included in the schedule as felt by the Tenderer may be included by the Tenderer as a separate item apart from the listed ones. Filling in of prices as per the schedule given is mandatory. Lump sum quotations for the entire work shall not be acceptable.

b. Designing and Preparation of detailed working Drawings. Survey work, if any required are all included in the Tenderers scope. Quoted cost shall include all the above. No extra payment shall be made on any account.

c. Whatever statutory approvals are required during the designing / construction and commissioning stages of the plant and for its subsequent operation till handing over the same to the employer, shall have to be obtained by the successful Tenderer.

d. Design calculations have to be submitted along with the working drawing at the time of tender stage. The technical data provided along with this tender is for the guide line only.

e. The management reserves the right to get the designs submitted by the agency checked for its succesful treatment of the inflow sewage to meet the desired parameters after the treatment through any reputed agency.

2. PREMABLE TO CIVIL WORKS:

Quoted price shall include for designing, preparation of detailed working drawings, Obtaining approvals, Providing as per approved drawings, Cleaning of site after completion of work, making connections with up-streams and down-streams units, giving hydraulic and performance test, furnishing as built drawings and operation manual etc., including as per detailed specifications.

3. PREAMBLE TO EQUIPMENTS:

a. Quoted price shall include for designing preparation of detailed working drawings, fabrication, and transportation to site, installation, testing, commissioning and final painting etc., complete.

b. Price of pumps shall be inclusive of civil foundation work, motor base plate, coupling, foundation bolts suction and delivery piping with special valves, etc., as well as giving performance tests at site.

c. MS pressure sand filter, Activated Carbon filter, Blowers, Sludge Handling, system with Automatic Filter press and Chlorinator of reputed make with all internal fittings, frontal piping, valves, pressure gauges including the civil foundation for placing the units and final coat of painting and all other appurtenances connected with the work etc., complete are to be included in the quoted price.

4. PREAMBLE TO INTERCONNECTED PIPING WORKS:

Quoted price shall include for providing all the piping materials, special fittings, giving hydraulic tests, excavation of cable trenches for laying, back filling, etc., complete.

5. PREAMBLE TO ELECTRICAL WORKS:

Quoted price include for supplying the required starters, MCC's required sizes of cables, earthing excavating of cable trenches for laying, back filling, etc., complete.

6. PREAMBLE TO SPARE PARTS:

Tenderer to quote separately with a list for the essential spares for the equipments required for 2 years of maintenance.

NOTE: Tenderer to quote separately for operating & maintenance of the plant for one year after the end of trial run period.

7. The design of the plant should be eco friendly. Only natural growth of micro organism which feed on the effluent and air is essential as the basic requirement. Use of chemicals should be bare minimum.

8. No parts of the plant should be seen above ground level, and area above can be utilized for other purposes.

9. A neat and clean environment may be maintained around the plant.

10. It shall ensure simple operation with minimum maintenance cost.

11. Detailed designs, drawings, maintenance manual and specifications of the plant shall be furnished.

GENERAL CONDITIONS OF CONTRACT

1. DEFINITIONS

The following terms shall have the meaning hereby assigned to them except where the context otherwise requires :

(a) OWNER

means The Principal
B.M.S Institute of Technology
Avalahalli
Yelahanka
Bangalore-64.

(b) ARCHITECT/CONSULTANTS

Shall be the person or persons for the time being or from time to time duly appointed by the Employer to act as 'ARCHITECTS' for the purpose of the contract. In some part of the document, the word 'consultant' shall also mean the said "ARCHITECTS".

(c) ENGINEER

Engineer shall be the person representing "B.M.S Institute of Technology" and the Consultants supervising the work at site.

(d) BIDDER / CONTRACTOR

Shall mean the successful tenderer to whom the turn key contract has been awarded.

(e) SUB – CONTRACTOR

Shall mean the person named in the contract for any part of the work or any person to whom any part of the contract has been sublet with the consent in writing by the Consultant and the legal representative, successors and assignee of such person.

(f) CONTRACT

Shall mean and include the following

Notice Inviting Tender, Tender Form, General Conditions of Contract, General and Technical Specifications, prepared by the bidder and approved by the department, Quantities, Drawings, Work Order and or any other correspondences of negotiations.

(g) SITE

Shall mean the actual place in, over or under which work is to be done, allotted by the Employer for contractor's use.

(h) WORK

Of the Contractor shall mean and include materials and labour or both.

(i) CONTRACT PRICE

Shall mean the sums in the form of lumpsum amount for the turn key job. Supported by a break up schedule showing the components with prices.

2. ASSIGNMENT AND SUB – CONTRACT

2.1 ASSIGNMENT

The Contractor shall not assign the contract or any part thereof or any benefit or interest therein or there under without the written permission of the Architects.

2.2 SUB CONTRACTING

The Bidder/Contractor shall not sub-contract the whole of the contract or any part of the works without the written consent of the Architects and such consent if given shall not relieve the Bidder/Contractor from any liability or obligation under the contract and the Bidder/Contractor shall be responsible for the acts, defaults and neglects of the Sub-Contractor, his agents, employees, or workmen as fully as if they were the acts, defaults or neglects of the Bidder/Contractor or his agents, servants or workmen.

3. DRAWINGS

3.1 ISSUE OF DRAWINGS

Drawings approved for construction will be the one prepared and freezed during the tender process. All the drawings and shop drawings will be approved by the Architect before execution. Changes in drawings after the signing of agreement is not permitted in normal circumstances. In very exceptional cases the matter will be considered by the BMS Authorities and their decision will be final.

3.2 COPIES OF DRAWINGS TO BE AT SITE

Five copies of the drawings duly approved and furnished to the Bidder/Contractor as aforesaid shall be kept at the site and the same shall at all reasonable times be available for inspection and used by the Architects or his representative and by any other person authorised by the Architect in writing.

3.3 MAKING OF FURTHER DRAWINGS AND INSTRUCTIONS

The Architects shall have full power and authority to ask for any further working drawings for detailing during the progress of the works such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the works and Bidder/Contractor shall on the approval of the drawings by the Architects carry out the work accordingly.

3.4 OWNERSHIP OF DRAWINGS

All drawings prepared by the Bidder/Contractor are deemed to be the property of the Architects/Owner.

3.5 EXECUTION AS PER DRAWINGS

The Contractor must not vary or deviate from the drawings in any respect while executing the work or executing any extra work of any kind whatsoever unless authorized by the Employer.

3.6 ROYALTIES AND PATENT RIGHTS

All royalties or other sums payable in respect of the supply and use in carrying out the work as desired by or referred to in the schedule of quantities of any patented articles, process or inventions shall be deemed to have been included in the contract sum and the contractor shall indemnify the Employer from the against all claims, proceedings, damages, costs and expenses which may be brought or made against the Employer or to which he may be put by reasons of the contractor infringing or being held to have infringed any patent rights in relation to any such articles, process and inventions.

3.7 AS BUILT DRAWINGS

The Bidder/Contractor should furnish 5 copies of as built drawings showing complete structural details and layout of civil works. One copy should be reproducible drawings like tracing.

4. GENERAL OBLIGATIONS

4.1 INSPECTION OF SITE ETC. BEFORE SUBMISSION OF TENDER

The Bidder/Contractor shall inspect and examine the site and its surroundings and shall verify the site conditions and all factors that may affect the design, execution and maintenance of this systems.

The Bidder/Contractor is expected to collect sufficient data to enable them to meet the above requirement in the project design and execution, during the site visit and study them before tendering.

4.2 SUFFICIENCY OF TENDER

The Bidder/Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his turnkey job tender for the works and the ceiling lumpsum cost and also of the split up prices shall cover all his obligations under the contract and all matters and things necessary for the proper completion and upkeep repairs during the defect liability period of 24 months and all expenses for the 12 months maintenance charges of the system.

4.3 CLARIFICATION BEFORE SUBMITTING TENDERS

Should the contractor notice any discrepancy or error in the statement made, or quantities or units shown against items, he shall immediately bring to the notice of the Employer/ Architects and obtain the clarification before submitting the tender. The tender shall be based on such clarifications received and shall be recorded as such in the covering letter to the tender, failing which the Employer shall have the right to ask the contractor to execute the work according to the statement made or quantities or units shown in the tender, without any compensation.

4.4 RATES QUOTED FOR FINISHED WORK

The quoted rates should be for the complete turnkey job finished in all respects as per the drawings and specifications.

4.5 TENDERS OPEN FOR

The tenders shall remain open for acceptance for a period of 90 days from the date of submission of the tender.

4.6 COMMENCEMENT OF WORK

The contractor shall commence the work at site, within 7 day of issue of formal work order and handing over of the site or being advised by the Employer unless otherwise specified, and shall proceed with the same with due expedition.

4.7 PROGRAMME OF WORK

Soon after the award of contract, the contractor shall submit to the Architect for his approval a programme to match with the planned completion of the whole job showing the order of procedure and method in which he proposes to carryout the works and shall whenever required by the Architect or Architect's representative furnish further detailed programme and particulars in writing of the contractor's arrangements for carrying out the works and of the constructional plant and temporary works which the contractor intends to supply, use or contract as the case may be. The submission to and approval, if any, by the Architect or his representative of such programmes or particulars shall not relieve the contractor of any of his duties or responsibilities under the contract.

4.8 CONTRACTOR'S EMPLOYEES

The Bidder/Contractor shall provide and employ at site in connection with the execution and maintenance works.

(a) Only such technical assistants as are skilled and experienced in their respective fields and such sub agents, foreman and leading hands as are competent to give proper supervision to the work they are required to supervise.

(b) Such skilled, semi – skilled and un – skilled labour as is necessary for the proper and timely execution and maintenance of works.

4.9 SUPERVISION OF WORKS

It will be the duty and responsibility of the selected agency to engage sufficient engineers and experts and supervise the work at site.

4.10 REMOVAL OF WORKMEN

The Architect/ Employer shall be at liberty to object to and required the Contractor to remove forthwith from the works any person employed by the contractor in or about the execution or maintenance of the works who in the opinion of the Architect misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Architect to be undesirable and such person shall be replaced by the contractor without delay by a competent substitute approved by the Employer.

4.11 COMMUNICATION TO BE IN WRITING

All references, communications, correspondences made by the Employer, the Architects, the Architect's representative or the Contractor concerning the works shall be in writing and no reference, communication, or complaint which is not in writing, shall be recognized.

4.12 CONSTRUCTION OF SITE SHED

Any site-shed, proposed to be temporarily constructed by the Contractor for his office work, storage of materials etc. shall conform to the standard sketch, or to the plan approved by the Architect. Permission for the construction of such sheds shall be obtained in writing.

4.13 MATERIAL, TOOLS AND PLANT

All materials required for the execution of the works shall be supplied by the Bidder/Contractor. Materials so supplied shall have the approval of the Architects before using them on the works. All the rejected materials shall be removed at once from the site of work at the Bidder/Contractor's own cost.

4.14 TOLLAGES ETC

The Contractor shall pay all tollages and other royalties, rent and other payments or compensations, if any for getting stone, gravel, sand, clay and all other materials required for the works.

4.15 SETTING OUT

The Bidder/ Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions and alignment of all parts of the works.

4.16 DAMAGE TO PERSONS AND PROPERTY

The Contractor shall indemnify and keep indemnified the Employer against all losses and claims for injuries or damages to any person or property whatsoever which may arise out of or in consequence of the construction and maintenance of works and against all claims, demands, proceedings, damages, costs, charges, expenses, whatsoever in respect thereof in relation thereto.

4.17 OPERATION WITH OTHER AGENCIES

The Contractor shall co-operate with the work of other agencies or contractors that may be employed or engaged by the Employer and as far as it relates to the Contractor's work. The sequence of work shall be so arranged that the work of other agencies are also in progress simultaneously.

The work should be arranged without seriously affecting the smooth working of the park.

4.18 BARRICADING AROUND EXCAVATED TRENCHES ETC.

The contractor shall at his own cost provide around excavation temporary barricading with ballies and bamboos with warning signals during day and night and shall maintain it so long as the trenches are not filled up. Similar barricades shall also be provided at all dismantling work, erection of structurals, sheeting work etc. No extra claim shall be entertained for providing, maintaining and removing such barricades.

4.19 FABRICATION DRAWINGS

The Bidder/Contractor shall prepare at his own cost all fabrication drawings of all enclosures and support systems and submit them to the Architects for their approval at least before 15 days of commencing the fabrication. All the details like sizes, capacities, dimensions, arrangement of fabrication etc. should be clearly indicated of these drawings. As this is a turn key job the primary responsibility of the correctness of these drawings depends with the Bidder/Contractor whether approved or not approved by the Architect.

4.20 PROTECTION OF UNDERGROUND SERVICES

The Bidder/Contractor must take precautionary measures to protect the underground and other services lines etc, and observe any specific instructions which may be given in this regard by the Architect. The Bidder/Contractor should get in touch with the BMSIT before any excavation is taken up to know the position of these underground services.

4.21 SITE ORDER WORK

A site order book must be maintained and always be available at site to record the instructions by the Architects or his representatives. The Contractor must see that the instructions noted therein are properly carried out.

4.22 SITE TO BE KEPT CLEAN

The surplus spoil and dismantled debris shall be removed to an isolated place or as directed by the Architects and stacked, leveled and dressed as directed.

5. LABOUR

5.1 LABOUR RULES

In respect of all labour directly or indirectly employed on the works by the contractor, the contractor shall comply with the provisions of the contract labour (Regulation and Abolition) Act 1970. Minimum wages Act 1948, Payment of Wages Act 1936 and any amendments thereof and all legislations and rules of the State and/ or Central Government or other local authorities framed from time to time, governing the protection on health, sanitary arrangements, wages, welfare and safety for labour employed on building and construction works and for bonus, retirement benefits, retrenchment/ lay off, compensation and all other 4 matters involving liabilities of employers to employees.

The rules and the other statutory obligations with regard to fair wages, welfare and safety measures, maintenance of register etc., will be deemed to be part of the Contract.

5.2 REPORTING ACCIDENT OF LABOUR

The contractor shall be responsible for the safety of all employees and/ or workers employed or engaged by him on and in connection with the works and shall forthwith report all cases of accidents to any of them, however caused and whenever occurring, to the Architect or his representative and shall make every arrangement to render all possible assistance and aid to the victims of the accident.

5.3 PROVISION OF WORKMEN COMPENSATION ACT

The contractor shall at all times indemnify and keep indemnified the employer against all claims for compensation under the provisions of the Workmen's compensation Act 1923 or any other law for the time being in force by or in respect of any workmen employed by the contractor in carrying out the contract and against all cost and expenses or penalties incurred by the Employer in connection therewith. In any case in which, by virtue of the provisions of the said Act, the Employer is obliged to pay compensation to a workmen employed by the contractor in executing the works, the Employer is obliged to pay compensation to a workmen employed by the contractor in executing the works, the Employer shall recover from the contractor the amount of the compensation so paid and without prejudice to the rights of the Employer under the said Act.

The Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any amount due by the Employer to the contractor, whether under this contract or otherwise without prejudice to any other remedy that may be available to the Employer in law. The employer shall not be bound to contest any claim made against it under the said Act, except in the written request of the contractor and upon his giving to the Employer full security for all cost for which the Employer might become liable in consequence of contesting such claim.

5.4 ACCIDENT OR INJURY TO WORKMEN

The employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of my accident or injury to why workmen or other person in the employment of the contract or his sub-contractors, and the contractor shall indemnify and keep indemnified the Employer against all such damages and compensation and against all claims, demands, proceedings costs, charges and expenses whatsoever in respect thereof or in relation thereto.

6. MATERIAL TEST AND WORKMANSHIP

6.1 QUALITY OF MATERIALS, WORKMANSHIP AND TESTS

All materials and workmanship shall be of the respective kinds described in the contract and in accordance with the Architect/ Employer or their representative's instructions and shall be subjected, from time to time, to such tests as the Architect or his representative may direct at the place of manufacture or fabrication or on the site or at all or any of such places. The contractor shall provide such assistance instruments, machines, labour and materials, as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any materials used and shall supply samples of materials before incorporation in the works for approval as may be required by the Architect/ Employer.

6.2 COST OF TESTS

The cost of making any test as per specification shall be borne by the contractor and contractor should arrange for all facilities like meters, instruments as required for carrying out such tests.

6.3 INSPECTION OF OPERATION

The Architect/ Employer or their representative shall at all times have access to the works and to the site and to all workshops and places where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility for any every assistance in or in obtaining the right to such access.

6.4 EXAMINATION OF WORK BEFORE COVERING UP

No work shall be covered up or put out of view without the approval of the Architect or the Architect's representatives and the contractor shall afford full opportunity to the Architect or the Architect's any representative to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The contractors shall give due notice to the Architect's representatives wherever any such work or foundations is or are ready or about to be ready for examination and the Architect's representatives shall without unreasonable delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundations.

6.5 REMOVAL OF IMPROPER WORK AND MATERIALS

The Architect or his representatives shall during the progress of the works have power to order in writing from time to time:

- a) The removal from the site within such time or times as may be specified in the order of any materials which in the opinion of the Architect or his representative are not in accordance with the contract.
- b) The substitution of proper and suitable materials.
- c) The removal and proper re-execution notwithstanding a previous test thereof or interim payment therefore of a work which in respect of materials or workmanship is not in the opinion of the Architect or his representative in accordance with contract.

6.6 SUSPENSION OF WORK

The contractor shall, on the written order by the Employer suspend the progress of the works or any part thereof for such time or times and in such manner as the Architect may consider necessary and shall during such suspension, properly protect and secure the work, so far as is necessary in the opinion of the Architect.

7. TIME OF COMPLETION AND TAKING OVER

7.1 POSSESSION OF SITE

Save in so far the contract may prescribe the extent of portions of the site of which the Architect is to be given possession from time to time and the order in which such portions will be available to him and subject to any requirement in the contract as to the order in which the work shall be executed, the Architect shall give to the contractor possession of so much of the site as may be required to enable the contractor to commence and proceed with the construction of the works in accordance with such reasonable proposals of the contractor as he will make in writing to the Architect and shall, from time to time as the work proceeds give the contractor possession of such further portions of the site as may be required to enable the contractor to proceed with the construction of the works in accordance with the said programme or proposal.

7.2 TIME OF COMPLETION

Time is deemed to be the essence of this contract and the whole of the works shall be completed within the time stipulated or within such extended time as has been allowed under Clause 7.3.

7.3 EXTENSION OF TIME OF COMPLETION

As per Clause 21 of Notice Inviting Tender, the Contractor has to apply for extension of time well in advance through the Consultant who will examine the same and make appropriate recommendation based on the above clause.

7.4 WORK TREATED AS COMPLETE

The work shall not be treated as complete until :

- (i) The site is clear from all materials, site shed etc, and the Architect is satisfied with the job done by the Bidder/Contractor.
- (ii) Any other material, taken on loan/transfer from other agency have been returned by the Bidder/Contractor.
- (iii) All power and water supply connections taken for the execution of the works have been disconnected by the Bidder/Contractor.
- (iv) Rectification of any damage done by the Bidder/Contractor to the work executed have been satisfactorily done by the Bidder/Contractor.
- (v) The works shall not be considered as completed until the Architect has certified in writing that they have been virtually completed and the Defects Liability Period shall commence from the date of such certificate.

7.5 TAKING OVER

After completion of works or any substantial part of the works before the completion of the whole of the works, the contractor shall notify the Architects in writing, who within 15 days of receipt of the said notice shall give such certificate with respect to any substantial part of the works which has been both completed to the satisfaction of the Architect and occupied or used by the Employer or refuse to issue the same stating the reasons thereof in writing. When any such certificate is given in respect of a part of the works, such part shall be considered as completed for the purpose of taking over and computation of the period of maintenance of such part, that is., such period shall commence from the date of completion of such part of the works as certified. The works in whole or part shall not, however, be treated as completed for the purpose of other relevant clauses hereof unless and until the provisions of clause 7.4 hereof are fully complied with.

7.6 MAINTENANCE

For a period of 24 months commencing immediately after taking over of the work by employer, the contractor's liability shall be to replace the defective parts, rectify/ reconstruct the defective work that may develop of his own construction or those of his sub-contractors approved by the employer (under clause 2.1 and 2.2) arising solely from faulty materials or workmanship.

If it is necessary for the contractor to rectify/ reconstruct any defective portions of the work under the contract, the provisions of this conditions shall apply to the portions of work so replaced or renewed until the expiration of 3 months from the date of such replacement or renewal or until the end of the above mentioned period of 6 months, whichever may be later. If any defects be not remedied within a reasonable time the Employer may proceed to do the work at Contractor's risk and expense, but without prejudice to any other rights which the Employer may have against the contractor in respect of such defects.

The full work has to be guaranteed for a period of 5 years against failure or malfunction. A guarantee bond in stamp paper has to be executed to this effect before the final bill is passed.

The first year of the defect liability period the agency will have to maintain the plant and operate the same. The cost of labour and materials for this maintenance should also be included in the costing.

8. TERMINATION OF CONTRACT

8.1 TERMINATION OF CONTRACT

If the contractor has abandoned the contract or has failed to proceed with the work with due diligence or the progress on any particular item or items is/ are slow or he has failed to execute the work in accordance with the terms and conditions of the contract, is persistently or fragnantly neglecting to carryout his obligation under the contract, then it shall be lawful for the Employer to terminate the contract forthwith under written notice and to proceed with the balance of the work through any other agencies. During the course of execution of the job, in case the contractor has done any substandard work, he shall be asked in writing to dismantle and re-do the same at his own expenses. If the contractor fails to comply with the above instructions immediately, then the Employer shall proceed with the above rectification work, through another agency or agencies. Similarly, if the contractor goes slow on any particular item or items of work, the Employer shall have right to execute this item or items through another agency or agencies, including its own department.

8.2 BACK CHARGING THE CONTRACTOR

Extra cost and expenses incurred for completing the work or balance work or carrying out the rectification of any work as mentioned above through another agency or agencies including its own department shall be debited to contractor's account and shall be recovered from any money due or that may become due to the contractor without prejudice to any other remedy that may be available to the Employer in law.

9. ALTERATIONS, ADDITIONAL AND OMISSIONS

9.1 VARIATIONS

This being a lumpsum contract variations are not desirable. But the Architect shall be entitled to make variations in very special cases and the payment for such variation will be decided by the Architect whose decision shall be final.

9.2 ORDERS OF VARIATIONS TO BE IN WRITING

No such variation shall be made by the Bidder/Contractor without an order in writing of the Architect, provided that no order in writing shall be required for increase or decrease as a resuly of the actual quantities exceeding or being less that those stated in the item rate schedule. In such cases the Bidder/Contractor shall be paid only the adjusted ceiling lumpsum based on the actual quantity of work done as stated in Condition No. 23 of N.I.T.

9.3 EXTRA ITEMS

As detailed under Clause 24 in Notice Inviting Tenders

9.4 REBATE / EXTRA OVER ORIGINAL ITEM

(a) If there is a deviation in the specification or drawing of the tender, rebate/extra over the quoted lumpsum shall be generally derived as per principle laid down under class 24 of N.I.T.

(b) Such variations will be adjusted in the lumpsum agreed upon.

9.5 CLAIMS

The Bidder/Contractor shall send to the Consultant's representative an account giving full and detailed particulars with proper analysis of all claims for any additional expense to which the Bidder/Contractor may consider himself entitled and of all extra items of work ordered by the Architect, which he has executed, within one month of the execution of such work, and no claim for payment for any such work will be considered which has not been included in such particulars. Provided always that the Architect shall be entitled to authorize payment to be made for any such work notwithstanding the Bidders/Contractors failure to comply with this conditions, if the Bidder/Contractor has at the earliest practicable opportunity notified the Architect in writing, that he intends to make a claim for such work.

10. MEASUREMENT

10.1 QUANTITIES

The split up details of all components with prices will be treated as schedule of quantities and rate.

10.2 WORKS TO BE MEASURED

It will be the duty and responsibility of the Bidder/Contractor to arrange for joint measurements with the Consultant to see whether the work has been done exactly as per the approved drawing. Stage certificate will be made by the Architect, and given to the agency to enable them to prepare the bills.

11. SETTLEMENT OF DISPUTES

11.1 MATTER TO BE SETTLED BY OWNER

All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the works or after their completion shall be referred by the contractor to the Employer and the Employer shall within a reasonable time after their presentation make and notify decisions thereon in writing.

The decisions, directions, clarifications, measurements, drawings, and certificates with respect to any matter the decision for which is specially provided for by these or other special conditions to be given and made by the Employer or by the Architect on behalf of the Employer are matters which are referred to hereinafter as Excepted matters and shall be final and binding upon the contractor and shall not be set aside on account of non-observance of any formality, any omission, delay or error in proceeding in or about the same or on any other ground or for any reason and shall be without Appeal.

In the event of any dispute or difference between the parties hereto as to the construction or operation of this contract, or the respective rights and liabilities of the parties on any matter in question, dispute or difference on any account or as to the withholding by the Employer of any certificate to which the contractor may claim to be entitled to or, if the Employer fails to make a decision within a reasonable time, then and if any such case, but except in any of the Excepted matters referred to in the above clause, the contractor after 90 days of his presenting his final claim on the disputed matters, may demand in writing that the dispute or difference be referred to arbitration.

Such demand for arbitration shall specify the matters which are in question, dispute or difference, and only such dispute or difference other than Excepted matters of which the demand has been made and no other dispute or difference shall be referred to the arbitration of an officer of the Employer to be nominated by its Director of the Employer for the time being or if there be no Director the relevant time then by the Governing Council of the Employer and the provisions of the Indian Arbitration Act, 1940 for the time being in force or of any other Act of the Legislature passed in substitution thereof or modifications thereof and for the time being in force shall apply to such arbitration.

11.2 ARBITRATION:

The contractor shall not, except with the consent in writing of the Employer, the Architects, in any way delay the carrying out of the work by reason of any such matter, question or dispute being referred to arbitration but shall proceed with the work with all due diligence and shall, until the decision of the arbitration is given, abide by the decision of the Architect and no award of the arbitrator shall relieve the contractor of his obligations to adhere strictly to the Architect's instructions with regard to the actual carrying out of the work except as specifically affected by such award.

12. NOTICES

12.1 SERVICE OF NOTICE IN CONTRACTOR

All certificates, notices or written orders to be given by the Employer or by the Architect to the contractor under terms of the contract shall be served by sending by post or delivering the same to the contractor's place of business or such other address as the contractor shall nominate for this purpose.

12.2 SERVICE OF NOTICE ON OWNER

All notices to be given to the Employer under the terms of the contract shall be served by sending by post or delivering the same to the Employer's address, under receipt.