

Bharat Heavy Electricals Limited
High Pressure Boiler Plant
Tiruchirappalli – 620 014. India
Civil Engineering Department (Township)

TENDER DOCUMENT (PRICE BID)

Name of work : Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu

Tender Notice No. : Township 07 / 10

Tender Schedule No. : T 39/ 10

Period of Contract : 8 Months

Issued to :



BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Unit : TIRUVERUMBUR, BOILER PROJECT, P.O.
TIRUCHIRAPALLI - 620 014.

CIVIL ENGINEERING DEPARTMENT

NOTICE INVITING TENDER

01. Name of Work : **Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu**
02. Earnest Money Deposit : **Rs.2,00,000/-**
03. Completion Time : **EIGHT (8) Months**
(From the date of commencement of the work which will be reckoned from the date of handing over of the site to the Contractor)
04. Cost of Tender Document : **Rs.750/-** (including Sales Tax)
This amount will not be refunded under any circumstances
05. Last Date for Receipt of Tenders : **09.30 Hrs. on 22.11.2010**
06. Date of Tender Opening : **10.00 Hrs. on 22.11.2010**
07. Maintenance Period : **6 (Six Months)**
(from the date of actual completion of the entire work handing over to Bharat Heavy Electricals Limited)

Tender document contains **195** pages in Qualification Bid and **25** pages in Price Bid including Bill of Quantities, etc.

Issued to Messrs. / Thiru :

.....

.....

.....

ISSUING OFFICER

CONTRACTOR

2

ACCEPTING OFFICER

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI – 620 014**

CIVIL ENGINEERING DEPARTMENT (TOWNSHIP)

PREAMBLE

01. The scope of work includes **Design and construction of 5 lakh litre capacity shaft type RCC overhead tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu.**
02. Time is the essence of the contract. Being a time bound project with capital expenditure, the contractor should make all efforts to complete the work in time
03. The scope includes cost of cement, reinforcement steel, structural steel, Cast Iron pipes, Cast Iron Specials and accessories .
04. However, cement, reinforcement steel and structural steel will be issued by BHEL at site and the cost of the same will be recovered from the contractor's running bills for quantity consumed at the recovery rate mentioned below.
- | | | |
|---------------------|---|---------------|
| Cement | - | Rs 5160 / MT |
| Reinforcement Steel | - | Rs 36030 / MT |
| Structural Steel | - | Rs 40290 / MT |
| Tubular Steel | - | Rs 40290 / MT |
05. The tenderers are advised to visit the plant area near Thirumayam in Pudukottai (Dt.) and get themselves acquainted with the site conditions before submitting the offer
06. **The following eligibility criteria shall be complied to fulfill the Qualification Bid**
- a. The tenderer should have EPF, PAN, Service Tax New Registration No., proof of having submitted IT return for the last three years, Profit & Loss account and balance sheet certified by the auditor.
 - b. Average annual financial turnover in OHT construction in the last three years should be atleast Rs.50 Lakh
 - c. During last seven years should have successfully completed either
 - i. Three similar works each not less than Rs.65 Lakh value of respective work (or)
 - ii. Two similar works each not less than Rs.82 Lakh value of respective work (or)
 - iii. One similar work not less than Rs.130 Lakh value of respective work.
 - d. Latest Solvency (obtained within 6 months) from the Nationalised / Scheduled bank shall be at least Rs.88 Lakh
 - e. Should have constructed an OHT of capacity 300 CUM in the last seven years
07. The works executed in the own name of the tenderer only will be considered for eligibility criteria. The nominated committee may also visit the works executed by the contractor to ascertain the nature of work before qualifying

08. BHEL reserves its right to reject the tender on account of unsatisfactory past performance by the present tenderer in another project / sister unit awarded under different enquiry.
09. Dissimilar / irrelevant works will not be considered for eligibility criteria.
10. Documentary evidences (Xerox copies - attested) for turnover, works experience, P.F. & Sales Tax registration etc., all as indicated & required in the tender document should be furnished without which it will not be taken into account.
11. The value of turnover and the value of similar works mentioned above includes cost of cement, reinforcement steel, structural steel, cast iron pipes and specials.
12. The norms for qualification with prescribed score are attached in the Qualification Bid Document. Evaluation will be done accordingly. Min. score required for qualification is 60.
13. Quoted rate shall be firm throughout the contract period of 8 months and no cost escalation is allowed on any account.
14. The lumpsum rate offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, labour colonies, establishment, services, roads, revenue expenses, overheads, profits & all other incidentals etc., complete. However if the service tax is applicable for this contract work and free issue materials, the same will be extra and will be reimbursed on production of valid document proof for having paid service tax by the contractor.
15. Some changes are likely in the layout, design and specifications of the work. The rates quoted shall be deemed to be inclusive of all such contingencies.
16. The contractor should submit the mix design for RCC for different mix of concrete for different grade of cement including admixture of approved make at his cost through reputed institution.
17. The contractor should use only weigh batch for all reinforced cement concrete works (controlled concrete). The tenderer is advised to install concrete mini batching plant at site considering the quantum of concrete work involved.
18. Usually, working hours are limited to day time only. In emergency cases to carryout works during nights, it may be done so with the specific prior permission of BHEL. In such case, it is to be carried out in the presence of BHEL officials or their authorized persons.
19. The work shall be carried out as per the approved drawings, Civil Engineering Department Work & Safety procedure, AWS / BIS specifications, standard code of practice and as per the instructions of Engineer-in-charge. The brief description of items of work is given in the bill of quantities provided in the Price Bid. Tenderer has to quote rates both in figures and in words for all the items given in the Bill of Quantities provided in the Price Bid. **(page No. 19).**
20. For any item of work not covered in Bill of Quantities, the rate will be arrived at based on the conditions given in BHEL General Conditions of Contract in force.
21. The contractor has to furnish the security deposit, as per Clause 13 of Tender Notice, attached in the Price Bid if the work is awarded. Also it is to be noted that after award of work the contractor has to furnish 50 % of security deposit before the commencement of work.

22. The contractor should bring the construction earth moving machineries like Poclain, JCB etc., as and when required for the work without any delay. Also required number of the following tools & Plants / instruments shall be made available always at site for the works.
- a. Full load mixture machine
 - b. Petrol / Kerosene driven vibrator/ mechanical vibrator
 - c. Cube moulds
 - d. Inter carting vehicle (tractor, hand trolley etc)
 - e. Mobile / Hydraulic crane
 - f. Welding machine etc.
 - g. Steel shuttering
 - h. Pipe scaffolding
 - i. Slip form Shuttering & Allied Material
23. The contractor has to arrange sufficient number of lorries to collect & transport the surplus earth, construction debris generated, etc. at site. Otherwise BHEL would clear the debris at the contractor's risk and cost.
24. Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is done without the presence of contractor's representative at the work spot. The contract should arrange for surveying construction site at his own cost.
25. Statement of completed works with detailed measurements along with material reconciliation statements shall be submitted by the contractor in the last week of every month for processing bill.
26. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
27. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
28. The contractor shall strictly adhere to various labour laws in force.
29. The contractor has to submit the list of machineries to be deployed exclusively for this work, organization chart of their set up for the works and any change thereafter in the organization set up shall have the prior approval of BHEL.
30. The contractor should submit the programme for the completion of work and the list of machineries and site personnel to be deployed for the work along with tender.
31. The contractor should establish his own site office, for which vacant land will be allotted on specific request for which the rent will not be collected. No land will be provided towards labour colony.
32. The contractor should establish his own site office, fabrication yard, handling facility, storage facility to stock about 100 MT of cement etc., for which vacant land will be allotted on specific request for which the rent will not be collected.
33. The contractor is required to carry out construction activities as directed by the department officials. It is required to engage certain minimum strength of staff for effective supervision of works as indicated below:
- | | | |
|--|---|--------|
| Site in-charge / Construction Manager | - | 1 No. |
| Planning Engineer and coordinator | - | 1 No. |
| Qualified Surveyor | - | 1 No. |
| Civil Engineer (Graduate in Civil Engineering) | - | 2 Nos. |
| Supervisor/Engineer (Diploma Holder) | - | 2 Nos. |

34. In addition to the above, Quantity surveyors have to be engaged to prepare measurements and submit the bills.
35. Adequate number of Quality Engineer and qualified Safety Engineer should be deployed at site.
36. To safeguard the persons working at underground etc., sufficient number of Industrial Safety PPE shall be provided at tenderer's cost in appropriate level and locations. The working hand including Supervisors, Engineers should wear the personal protective items and safety measures such as helmets, safety belts, shoes, etc., before entering into working place.
37. The tenderer has to deploy adequate labour of required categories such as Unskilled, Skilled, Mason, Carpenter, Plumber, Welder, Fitter, Mistry, Technically experienced, etc. so as to execute the works simultaneously in all areas of work. The Technical persons with experience shall have to produce valid certificate for verification.
38. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex.
39. Exclusive Stores personnel should be engaged who would co ordinate with department official for clearance and collection of BHEL supplied materials required for works.
40. Separate non-technical persons should be engaged for arranging daily gate passes for labours and vehicles entry in all the gates of Factory Complex.
41. The tenderer shall carry out health performance test at his cost for all the workmen engaged in the work through a registered medical practitioner and produce certificate on demand.
42. It shall be the responsibility of the contractor to see that the workmen do not utilize the departmental canteen facilities. Contractor has to make his own arrangements to provide refreshment for the workmen.
43. All the works shall be executed as per the standard specifications as provided in TNBP / BIS.
44. All the materials to be used in the work and the nature of work shall conform to the respective TNBP & BIS and National Building Organisation, Standard Specifications forming part of "ALL INDIA STANDARD SCHEDULE OF RATES" specifications and shall be got approved by the Engineer-in-charge before actual incorporation in the work.
45. The contractor should maintain proper accounts for cement, reinforcement steel and structural steel sections and other materials if any supplied by this department and should be available at the site of work for verification and check by the Officials of this Organisation at any time.
46. All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work. All the structural works including fabrication, erection etc., are subjected to inspection and clearance by Third Party Agency fixed by BHEL.
47. The contractor should use only the materials of brand and quality as approved by BHEL.
48. All materials and consumables brought by the contractor should have manufacturer's certificate.
49. All tools and plants including jack hammer with silencer & bits, rock drilling machine, etc., required for all the works covered under this contract will have to be brought by the contractor.

50. All safety measures are to be followed during execution of work, particularly during blasting and only licensed blaster should be engaged for this purpose. Sufficient care shall be taken by the contractor during excavation to avoid damages to the buried pipe lines, cables and other infrastructure like railway lines if any etc. Controlled blasting including muffling can be carried out with prior permission from safety department.
51. Contractor's materials and tools & plants shall have to be brought inside the plant area with proper invoice / voucher and make necessary entry in the security gate. They should maintain proper record for tools and plats, materials, etc., brought inside the factory complex.
52. The contractor should extend full co-operation with the third party agencies engaged, if any by BHEL to adhere the Quality Control Procedures ensuring quality.
53. The contractor should extend full co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.
54. With regard to specifications not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by Bharat Heavy Electricals Limited, shall apply.
55. The Contractor will have to make his own arrangements for water without any extra claims. Adequate curing is to be ensured through pumping for the concrete at heights.
56. On the written request from the contractor **Electrical energy required for the work may be given by this organization at any one point at the site of work at chargeable basis**. The approximate power requirement shall have to be indicated while submitting the tender. BHEL does not accept any liability whatsoever for non-supply, delay in supply or failure of supply of electrical energy. Contractor shall ensure that there is no wastage of electrical energy otherwise supply is liable to be stopped at contractor's risk and cost. The contractor shall make leak proof / fire proof shed and provide control panel board of required capacity and lay the required cables at their own cost for further distribution. The contractor has to mobilize DG set of suitable capacity at his cost for uninterrupted progress of work in case of non availability of power from the grid.
57. The contractor should be in a position to make his own arrangement for compressed air without any extra claim for the uninterrupted operation of jack hammer with silencer
58. Purchase preference policy if applicable will be extended to CPSE bidders subject to other terms & conditions as provided in the office memorandum issued by DPE. The tenderer has to furnish copy of Government circular for claiming purchase preference.
59. Tenderers are requested to furnish the duly filled in E format attached as separate sheet along with a cancelled cheque leaf to accept Electronic fund transfer / R T G S transfer for any payment from BHEL, Trichy.
60. The main work order may further be split in too few sub work orders. The process of billing, material tallying and submission of completion reports will be according to the individual sub work orders.
61. Bank Guarantee format can be obtained after award of work in case of successful tenderer.
62. No advance / mobilization advance will be given.
63. LD / Penalty clause is applicable as per General Conditions of Contract in force.
64. BHEL reserves its right to accept / reject any or all the tenders without assigning any reasons.

65. Also BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.
66. The quoted amount as provided in this tender will be in full and final for functions to be performed by the contractor and no claim whatsoever shall be made against BHEL in respect of any part relating to the plans, drawings and other documents submitted by the contractor. The drawings, design, plan, related details prepared and acquired by the Contractor for the work entrusted to him under this agreement will become the property of BHEL. The drawings, design, plan, related details cannot be issued to any other person, firm or authority or used by the Contractor for any other project without prior permission of BHEL.
67. The contractor shall supply required drawings. to the Department, free of cost, till the completion of the work.
68. The contract shall not make any deviations, alterations or omissions from the approved drawings, without prior consent of the Department.
69. All the approved drawings shall be the property of BHEL. The same shall be submitted to the department immediately after getting them approved.
70. BHEL may review the work carried out by the contractor at planning, detailed engineering or at any pre-constructional stage to get satisfied with the standards and procedures adopted by the contractor to make available the concerned documents to BHEL on demand.
71. It is the responsibility of the contractor to plan and design the OHT and Sump based on standard engineering practice. The contractor shall stand guarantee for the performance of the system designed by them for a minimum of 50 years. A guarantee bond on standard approved proforma shall be provided by the contractor.
72. The contractor shall provide detailed computations and back up of structural design sheets to BHEL
73. The contractor shall provide all drawings and designs on auto CAD STADD-PRO or any relevant computer programmes. Copy of final design / drawings shall be made available to BHEL in soft copy also.
74. All structural designs shall be vetted by IIT / SERC / NIT or any other approved institution at the contractor's own cost. Nothing extra shall be paid on this account. The structural design drawings and the calculation sheets shall be signed and verified by the proof checking agency and the certificates regarding safety of structure as per codal provisions shall be submitted to BHEL

Scope of Work for Over Head Tank

1	Design & Drawing	Submission of design basis, design calculation for approval, Engineering & design of the OHT and submission of construction drawings.
2	Type of the Tank	Shaft / Funnel RCC Structure
3	Capacity of the Tank	5 Lakh Litre
4	Staging Height	25 m (Height between the lowest water level inside the tank and FFL)
5	Compartments	2 No (Inner and Outer tank holding each net capacity of 2.5 lakh litre)
6	Free Board	300 mm
7	Inlet Pipe	200 mm dia CI Double Flanged Pipe LA class confirming to IS 7181 of latest Edition
8	Outlet Pipe	200 mm dia CI Double Flanged Pipe LA class confirming to IS 7181 of latest Edition
9	Overflow Pipe	150 mm dia CI Double Flanged Pipe LA class confirming to IS 7181 of latest Edition
10	Scour Pipe	150 mm dia CI Double Flanged Pipe LA class confirming to IS 7181 of latest Edition
11	Manhole Cover	Minimum two number of 500 mm internal diameter including frame weight 116 Kg. medium duty (The weight of cover 58 Kgs. and frame 58 Kgs. subject to approval of the Engineer-in-charge.)confirming to IS-1725-1991 of latest with up to date amended
12	Ventilating Pipes	Cast Iron with Cowl and Mosquito proof cover suitable for OHT as per standard engineering Practices
13	Ladder	MS Angle with chequered Plates for min 1 m wide at the dome of the tank with hand rails
14	Painting	Water proofing Cement paint all around the outer wall
15	Safe Bearing Capacity of Soil	220 KN / SQM
16	Reinforcement Steel	Confirming to IS 1786 of Latest Edition
17	Cement	Grade 43 Confirming to IS 1182 of Latest Edition
18	Concrete	Applicable admixtures for workability / water tightness suitable for food grade water storage structures are to be used

1. The scope also includes all other required accessories such as control valves for inlet and outlet, lightening arrestor, real time remote monitoring water level indicator through SCADA and suitable staircase inside the shaft for access up to the top of tank as per standard engineering practice and subject to approval of the Engineer-in-charge
2. Provision for valve operator room as per the approval of the Engineer-in-charge.
3. Internal electrification including adequate lighting inside the shaft & installation of aviation lighting as per the standards at the top of the tank
4. Each construction joint shall be provided with required width and thick PVC water stopper of suitable size .
5. All the fittings shall be embedded in the structure while the work is in progress and all connections shall be left outside the structures with sluice valve/ control valves and other accessories in position ready for connection with incoming and outgoing pipes. The direction of scour pipe be kept towards the nearby drain as per direction of Engineer-in-charge.
6. All the specials/fittings/valves shall confirm to relevant standard .

CONTRACTOR

9

ACCEPTING OFFICER

Scope of Work for Under Ground Sump

1	Capacity of the Sump	5 Lakh Litre
2	Type of the Sump	RCC
3	Compartments	2 No Each compartment of net capacity of 2.5 lakh litre)
4	Size	To be Decided as per site Conditions and Design requirements
5	Free Board	300 mm
6	Ventilating Pipes	Cast Iron with Cowl and Mosquito proof cover suitable for Underground Sump as per standard engineering Practices
7	Staircase	RCC Steps Inside the Sump for Cleaning
8	Painting	Water proofing Cement paint
9	Safe Bearing Capacity of Soil	220 KN / SQM
10	Cover Slabs	Tank to be Covered with RCC Slabs with edges covered in MS Plates with the provision of supporting beams
11	Inlet , Outlet & Scour	Separate inlet / outlet arrangement for each compartment as per design and bye pass arrangement for direct pumping to the OHT including required fittings
12	Reinforcement Steel	Confirming to IS 1786 of Latest Edition
13	Cement	Grade 43 Confirming to IS 1182 of Latest Edition
14	Concrete	Applicable admixtures for workability / water tightness suitable for food grade water storage structures are to be used

1. The scope also includes provision of hand rail around the periphery above ground level and real time remote monitoring water level indicator through SCADA .
2. Interconnecting the sump with the OHT
3. There shall be 1 m. wide gallery all around the sump with provision of necessary railing.
4. The sump shall be painted with water proofing cement paints complete in all respect

Schedule of Payment

No advance payment is entertained. On each stage payment 10 % as security will be retained by BHEL till full security deposit as in clause 13 of the tender notice in price bid is reached.

<p>1) For Over Head Tank</p> <p>a) On approval of design, construction drawing & completion of foundation up to finished floor level</p>	<p>10 % of the contract value</p>
<p>b) On completion of RCC works up to +10m level</p>	<p>20% of the contract value less payment already made in stage (1 a)</p>
<p>c) On completion of RCC works up to +25m level</p>	<p>40% of the contract value less payment already made in stage (1 a) + (1 b)</p>
<p>d) On completion of floor slab, shaft, compartment & outer wall up to free board level</p>	<p>60% of the contract value less payment already made in stage (1 a) + (1 b) + (1 c)</p>
<p>e) On completion of dome slab, hand rail including ladder</p>	<p>70% of the contract value less payment already made in stage (1 a) + (1 b) + (1 c) + (1 d)</p>
<p>f) Erection of inlet, outlet, overflow pipe, scour pipe, water level indicator with all necessary fittings</p>	<p>90% of the contract value less payment already made in stage (1 a) + (1 b) + (1 c) + (1 d)+(1 e)</p>
<p>g) Finishing works including fixing lightening arrestor & conducting leak proof test to the satisfaction of the department</p>	<p>100% of the contract value less payment already made in stage (1 a) + (1 b) + (1 c) + (1 d)+(1 e) + (1 f)</p>
<p>2) For Under Ground Storage Sump</p> <p>a) On approval of design, construction drawing & completion of floor slab</p>	<p>20 % of the contract value</p>
<p>b) On completion of side wall upto 50 % of the designed height including the compartments</p>	<p>40% of the contract value less payment already made in stage (1 a)</p>
<p>c) On completion of side wall including free board</p>	<p>60% of the contract value less payment already made in stage (1 a) + (1 b)</p>
<p>d) On completion of cover slab including steps, gallery , hand rail and water level indicator</p>	<p>80% of the contract value less payment already made in stage (1 a) + (1 b) + (1 c)</p>
<p>e) On completion of inlet to the sump, inter connection to the OHT including finishing works. conducting leak proof test to the satisfaction of the department</p>	<p>100% of the contract value less payment already made in stage (1 a) + (1 b) + (1 c) + (1 d)</p>

INSTRUCTIONS TO TENDERERS

1. The tender is open to all Contractors. The Contractors not borne on the approved list of contractors of this Organisation must submit the following testimonials simultaneously with their tenders.
 - i. A Certificate to establish that the tenderer is an independent contractor working on his own
 - ii. At least two certificates from responsible Officers of Government of Firms of repute, regarding the tenderer's capacity to undertake and carryout the work tendered for or similar work satisfactorily.

NOTE :

- a) Copies of testimonials unless attested by a Gazetted Officer will not be accepted
- b) Non – Submission of the above testimonials simultaneously with the tenders may result in the tender being rejected
2. The tenders should be accompanied by a list of contracts already held by the contractor at the time of submitting the tender and giving the following particulars
 - a) Value of each contract
 - b) The balance value of work to be done on the same
3. The tenderer is advised to obtain the tender documents in person or by a messenger duly authorized to do so. The BHARAT HEAVY ELECTRICALS LIMITED will not under any circumstances accept responsibility for the non – receipt of delay in the receipt of the tender documents by the tender.
4. Rate for each item of the tender schedule should be quoted in FIGURES and in WORDS. In case of any difference in the rates quoted in figures and in words, the lower of the two rates will be taken as the tendered rate. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any arithmetic deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
5. Rate quoted shall include all royalties, terminal taxes, Octroi duties, Central or Provincial Excise Tax, Sales Tax and any other taxes leviable under the State or Central Government rules. The Bharat Heavy Electricals Ltd., will not entertain any claim whatever in this respect. **However if the service tax is applicable for this contract work including free issue materials, the same will be extra and will be reimbursed on submission of the documentary evidence for having paid service tax by the tenderer.**
6. Should a tender find discrepancies or omissions in the drawings or any of the tender documents or should be in doubt as to their meaning, he should at once address the authority inviting the tender for clarification. Every endeavor is made to avoid any error which can materially affect the basis of the tender but the successful tenderer shall take upon himself to provide for the risk of any error which may be subsequently by discovered and shall make no subsequent claim on account thereof.
7. Tenders submitted by post should be sent "Registered Post with Acknowledgement due". These should be posted with due allowance for any delay in postal delivery. Tenders received after the due date and time of opening, tenders are liable to be rejected.

8. Where the tender called for covers only the building work and excludes internal services such as sanitary and water supply installations, electrification etc., the building contractor will have to leave pockets, holes, etc., as required for other works and will have to phase his work to ensure smooth progress of the work of the other agencies also as directed by the Engineer – in – charge.
9. Where the tender schedule contains special items of work such special floor finishes, foam concrete for insulation, special water proofing treatment to roofs etc., it will be entirely at the discretion of the Project Authorities to allot these items of work to other contractors specialized in these works. In such cases, the main building Contractor will have to tender all necessary co-operation to the agencies involved so as to ensure the smooth progress of all work.
10. The contractor's responsibility under this contract shall commence from the date of receipt of the LOI by the tenderer. The scheduled period of completion for this work will be as mentioned in page No. 02, and the Contractor will have to plan his work accordingly.
11. Generally, the maintenance period for any work under BHEL Organisation will be SIX (6) MONTHS .
12. **Earnest Money Deposit:**

Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. Shall also be furnished in the form of Pay Order or Demand Draft in favour of BHEL, EMD in any other form will not be accepted. The rate of earnest money deposit shall be as under:

Works costing up to Rs. 2 lakhs	NIL
Works costing more than Rs.2 lakh and up to Rs. 5 lakhs	Rs. 10,000/-
Works costing more than Rs.5 lakhs and up to Rs.10 lakhs	Rs. 20,000/-
Works costing more than Rs.10 lakhs and up to Rs.20 lakhs	Rs. 40,000/-
Works costing more than Rs.20 lakhs and up to Rs.30 lakhs	Rs. 60,000/-
Works costing more than Rs.30 lakhs and up to Rs.50 lakhs	Rs. 1,00,000/-
Works costing more than Rs.50 lakhs and up to Rs.100 lakhs	Rs. 1,50,000/-
Works costing more than Rs.100 lakhs	Rs. 2,00,000/-

One time EMD will also be Rs.2 Lakh.

EMD by the Tenderer will be forfeited if,

- a) After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.
 - c) The tenderer does not commence the work within the period as per LOI / Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.
 - c) EMD given by all unsuccessful tenderers shall be refunded normally within fifteen days of acceptance of award of work by the successful tenderer.
 - d) EMD shall not carry any interest.
13. Should a tenderer or a contractor on the list of approved Contractors have a relative, or in the case or a firm or Company of contractors any of its share holders or shareholder's relative, employed in a gazetted capacity in the Engineering Department of the Bharat Heavy Electricals Limited, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which tender, may be disqualified or if such fact subsequently comes to light, the contract may be rescinded in accordance with the relevant provisions in the General Conditions of Contract.

14. If tenderer expires after the submission of his tender or after the acceptance of his tender the BHEL may, at their discretion, cancels such tender. If a partner of a firm expires after submission of tender or after the acceptance of the Tender, BHEL may cancel such Tender at their discretion unless the firm retain its character.
15. The Bharat Heavy Electricals Limited will not be bound by any power of attorney granted by the tenderer or by changes in the composition of firm made subsequent to the execution of the contract. They may however dispatch such power of attorney and changes after obtaining proper legal advice the cost of which will be chargeable to the contract concerned.
16. If the tenderer deliberately gives wrong information in his tender or creates conditions favourable for the acceptance of his tender, the Bharat heavy Electricals Limited, reserves the right to reject such tender at any stage. Also BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.
17. Words importing the singular number shall also be deemed to include the plural number and vice versa where the context so requires.
18. The expenses for completing and stamping the agreement shall be paid by the contractor.
19. The General and special conditions are complementary to each other and where they are conflict the Special Conditions shall prevail. In regard to matters not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by the Bharat Heavy Limited, Shall apply.
20. Tenderers shall not increase their quoted rate in case the Bharat Heavy Electricals Limited, negotiates for negotiation for reduction of rate. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the rate originally quoted shall be binding on the tenderes for a period of three months from the date of opening of tenders.
21. Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection
22. All contractors will have to produce copy of Income tax Return for the last three years along with their tenders. Those Contractors whose income is not taxable will be required to give an affidavit of their income on the prescribed form.

TENDER NOTICE

NAME OF WORK : Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu

1. SEALED TENDERS for the above noted work are hereby invited from contractor experienced in works of similar kind and magnitude. Tenders will be received by ADDL.GENERAL MANAGER / CIVIL / TOWNSHIP Bharat Heavy Electricals Limited, Tiruchirappalli – 620 014. up to **09.30 Hrs** on **22.11.2010** and will be opened on the same day at **10.00** hrs. at the Office of the ADDL. GENERAL MANAGER / CIVIL / TOWNSHIP in the presence of such of those tenderers. Or their agents who may choose to attend.
2. TENDER FORMS and other particulars regarding the proposed work can be obtained on any working day from 8.00 A.M. to 4.30 P.M. up to **19.11.2010** on payment of the prescribed sum of **Rs.750/-** per set (including Sales Tax) Amount nor refundable.
3. TENDERS must be submitted in sealed covers and should be addressed to **DY.MANAGER/CIVIL/PLANNING (TOWNSHIP)** with full name and address of the tenderer and the name of work being noted on the cover
4. All entries in the tender documents should be in one ink. Erasers and overwritings are not permitted. All cancellations and insertions should be duly signed by the tenderer concerned.
5. TENDERERS should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign each and every page of Tender Documents including the drawings attached there to before submitting their tender.
6. UNIT rate should be quoted in figures as well as in words with reference to each item and for all the items shown in the attached schedule. These rates shall be for the finished work in site. Amount of each item and the total page by page and also the grand total amount of the whole contract should be filled in by the tenderers. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
7. In quoting their rates, the tenderers are advised to take account all factors including any fluctuations in the market rates etc. No claim will be entertained on this account after acceptance of the tender or during the currency of the contract.
8. Before tendering, the tenderers are advised to inspect the site of work and its environments and be well acquainted with the actual working and other prevalent conditions position of materials and labour, General and Special Conditions of Contract. Instructions to tenders, drawings and Specifications and all other documents which form part of the Agreements to be entered into.
9. In case of any discrepancy between general conditions of contract & preamble , only preamble prevails over the other . Likewise the specification in the BOQ over the rest of the document.
10. Quoted rate shall be firm throughout the contract period of **8 months** and no cost escalation is allowed on any account.

11. In the event of tender being submitted by firm the tender must be signed separately and legibly by each partner or member of the firm or in their absence, by the person holding the power of attorney on behalf of the firm concerned in the latter case a copy of the power of attorney duly attested by a Gazetted Officer must accompany the tender.
12. Every tender must be accompanied with EMD for the amount as specified in Page No. 02 in any of the form mentioned in Para 12 of the "Instruction to Tenderers". This Earnest Money will be refunded to the unsuccessful tenderers within fifteen days of finalisation of the award of work. In case of the successful tenderer, the Earnest Money will be retained as part of the Security Deposit for satisfactory completion of the work in accordance with Clause 16 of the General Conditions of Contract.

NOTE: Cheques, Currency Notes and Money Orders will not be accepted in lieu of the deposit receipt referred to above

13. Security Deposit

13.1 Security Deposit should be collected from the successful tenderer.

The rate of Security Deposit will be as below:

Up to Rs. 10 lakhs	10%
Above Rs. 10 lakhs up to Rs.50 lakhs	Rs.1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs.
Above Rs. 50 lakhs	Rs.4 lakhs + 5% of the amount exceeding Rs. 50 lakhs.

The security Deposit should be collected before start of the work from the contractor.

13.2 Security Deposit may be furnished in any one of the following forms

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of BHEL.
- iii) Local cheques of scheduled banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc.

(Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).

v) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.

vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.

vii) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50% may be recovered from the running bills.

viii) EMD of the successful tenderer shall be converted and adjusted against the security deposit.

ix) The security deposit shall not carry any interest.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

13. Unless the contractor whose tender is accepted signs the Contract Agreements and makes the necessary security deposit specified in Para 13 above within Seven days of the date of the order directing him to do so the amount of Earnest Money Deposit already deposited by him will be forfeited and acceptance of his tender withdrawn.
14. After tender opening if tenderer revokes his tender or increases his earlier quoted percentage rate or after acceptance of his tender does not commence the work in accordance with the instruction of the Engineer-in-charge, the Earnest Money deposited by him will be forfeited and acceptance of his tender withdrawn. If only a part of the work included in the tender had been awarded to the tenderer, the amount of Earnest Money to be forfeited will be based on the value of the contract so awarded.
15. The Bharat Heavy Electricals Limited reserved the right to reject any or all the received or accept any tender or part thereof without assigning any reason thereof. In the case acceptance of part of tender, time for completion may also be reduced to the extent considered appropriate by the Accepting Authority. Also BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.
16. Conditional and Un witnessed tenders, tender containing absurd rates and amounts tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions laid down by the Accepting Officer are liable to be rejected.
17. Tenders not submitted on the prescribed form are liable to be rejected
18. The work must be completed within a period as mentioned in page No.02.
19. The Chairman / General Manger / Deputy General Manager / Deputy Manager / Senior Engineer shall be Accepting Officer, herein after referred to as such for the purpose of this contract.
20. This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
21. The tenderers are advised to go through the condition stipulated in Tender document & code of conduct for 'Health & Safety of Contract Labourer' in details. Any violation thereof will invite punitive action being taken against them. While quoting the rate all the above factors are to be taken into account.

ISSUING OFFICER

SHEDULE 'A'

LIST OF WORKS AND PRICES

NAME OF WORK: Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu

DETAILS & QUANTITIES of each item of work shown in the BILL OF QUANTITIES are only approximate. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the corresponding rate quoted by the contractor in the BILL OF QUANTITIES

Sl.No.	Description of work / supplied	Total amount of work / supplies (in figures and words)		Period of contract
		Rs.	Ps.	
1.	Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu	-----		8 MONTHS

BILL OF QUANTITIES

Sl. No.	Appx. Qty.	Description of work	TNBP No.	Rate (Both in Unit fig & Words)	Amount Rs.	Ps.
---------	------------	---------------------	----------	---------------------------------	---------------	-----

AS PER SEPARATE SHEETS ATTACHED CONTAINING 1 PAGE

FROM SERIAL No. **1 to 2**

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI- 620 014**

BILL OF QUANTITIES

NAME OF WORK: Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount
1	1	Construction of 5 lakh litre capacity reinforced cement concrete shaft type over head water storage tank with 25 m staging consisting two chambers each holding 2.50 Lakh litre net capacity including evolving structural design and drawing vetted by third party and approved by BHEL before starting the work. The quoted rate shall include design, drawing, construction including all materials that go in to the work, conveyance of material, loading unloading & all other incidental charges etc complete., and as per the scope of work in the tender.		SET	
2	1	Construction of 5 lakh litre capacity reinforced cement concrete underground sump including evolving structural design and drawing vetted by third party and approved by BHEL before starting the work. The quoted rate shall include design, drawing, construction including all materials that go in to the work, conveyance of material, loading unloading & all other incidental charges etc complete., and as per the scope of work in the tender		SET	
				Total	

(RUPEES ONLY)

NOTE:-

1. Service Tax will be extra if applicable for this contract. Service Tax paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary evidence for having paid the service tax.
2. The period of contract is Eight months. The contractor is required to plan accordingly and complete the work in time.

CONTRACTOR

19

ACCEPTING OFFICER

SCHEDULE 'B'

LIST OF FREE ISSUE MATERIAL FROM BHEL STORE

Sl.No	Name of Material
1	Nil

SCHEDULE 'C'

ISSUE OF TOOLS AND PLANTS TO CONTRACTORS

Sl.No.	Qty.	Particulars	Details of BHEL Crew Supplied	Hire Charges Per unit Per Day	Place of Issue	Remarks
--------	------	-------------	-------------------------------------	--	----------------------	---------

.....Nil.....

a. Machineries shall not be operated over time without the written permission of the Sr. Engineer / Dy. Manager / Manager.

b. All Coolies, Watermen etc., required in addition to BHEL crew mentioned in column 4 above shall be arranged by the contractor at his own expense.

CONTRACTOR

20

ACCEPTING OFFICER

SCHEDULE 'D'

NOTE: All Drawings are to be signed by the Contractor as well as the officer entering into contract.

SL.No.	DRAWING NUMBER	DESCRIPTION
		-----NIL-----

SCHEDULE 'E'

LEAD STATEMENT

SI.No	Name of Material	Name of Source	Lead Particulars
1	Cement	Will Be supplied at PPP Unit - BHEL	
2	M.S Rounds, CTD Bars & Structural Steel, rails and all railway materials		
3	Broken Stones RR Stones etc	Paralimalai	10 km
4	Sand	Koodalur	18 km
5	Brick and Gravel	Kadiyapatti	6 km
6	Lime	Thirumayam	1 km

C.A.....Date
(To be used in conjunction with BHE Ltd., General Conditions of Contract)

AUTHORITY TO TENDER

Tender Notice No. **Township 07 / 10**

Office of the
ADDL.GEN. MANAGER / CIVIL /TOWNSHIP
BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHY – 14.

Tender Schedule No. **T - 39 / 10**

Item rate tender for work required Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu

Messrs / Mr.

.....of.....

are / is hereby authorized to tender for the above work. The Tender is to be delivered at the Office of the ADDL.GEN. MANAGER / CIVIL /TOWNSHIP Bharat Heavy Electricals Limited Unit, Thiruverumbur, Tiruchirappalli – 620 014, **up to 09.30 hrs. on 22.11.2010** addressed to the DY.Manager / Civil / Planning (Township), BHEL. Tiruverumbur, Tiruchirapalli – 620 014 superscribing the name of work as mentioned above.

Any correspondence concerning this tender should be addressed as indicated above quoting the Tender Notice, Schedule No. and other relevant particulars.

BHARAT HEAVY ELECTRICALS LIMITED DO NOT BIND THEMSELVES TO ACCEPT THE LOWEST OR ANY TENDER.

Issuing Officer with
Designation

Contract Agreement No.....

TENDER

To

The Additional General Manager/Civil/ Township
Bharat Heavy Electricals Limited
Unit : Tiruverumbur
TIRUCHIRAPPALLI – 620 014.

I / We hereby offer to carry out the **Design & construction of 5 lakh litre capacity shaft type RCC over head tank and sump including piping for PPPU – BHEL near Thirumayam in Pudukottai (Dt) Tamilnadu**

I / We hereby carefully perused the following documents connected with the above noted work and agree to abide by the same.

- 1.Specifications (General & Particular)
- 2..Schedule 'A', 'B', 'C', 'D' & 'E'
- 3.BHE Ltd., General & Special Conditions of Contract, Tender Notice and Instructions to Tenders attached hereto.

I / We forward herewith the sum of Rs.....as Earnest Money, which shall be refunded should this tender be rejected. I / We further agree to deposit such sum which along with the sum of Rs.....mentioned above shall make up 50% of the fully Security Deposit for this work as provided for under conditions of the BHARAT HEAVY ELECTRICALS LIMITED General Conditions of Contract.

I / We further agree to execute all the work referred to in the said documents upon the terms & conditions contained or referred therein and as detailed in Schedule 'A' and Bill of Quantities annexure thereto and to carry out such deviations as may be ordered, vide conditions 6 of the BHEL Ltd., General Conditions of Contract up to a maximum of 20% of the tendered amount of Rs.....

I / We further agree to refer all disputes, as required by condition 62 of the General conditions of Contract to the sole arbitration of an Officer, to be appointed by the General Manager, B.H.E Ltd., in his sole discretion whose decision shall be final and binding.

WITNESS

Signature of the Contractor

Date :

1.

2.

GENERAL SUMMARY

- | | | |
|----|---|-----|
| 1. | (a) Net Cost of works or building etc., from Schedule 'A' | Rs. |
| 2. | Provisional sum | Rs. |

.....

Total	Rs.
-------	-----

Rupees.....

Shri..... in the capacity of has been duly authorized by me / us to sign the tender for and on behalf of

(in block letters)

Date :

SIGNATURE OF CONTRACTOR

Witness :

Postal Address :

1.....
Address

Telephone No.

2.
Address

CONTRACTOR

ACCEPTING OFFICER

..... alterations have been made in the Tender Document and as evidence that these alterations were made before the execution of contract agreement, they have been initialed by the Contractor and the

.....
.....
.....

.....the said officer is hereby authorized to sign and initial on my behalf the documents forming part of this contract (Number of alternation in figures and words to be given here)

The above tender is accepted by me on behalf of the Bharat Heavy Electricals Limited, Unit: Thriuverumbur, Tiruchirappalli – 620 014. for a sum of Rs.....

.....
.....

.....at the rates as indicated in Schedule 'A'.(Bill of Quantities)

SignatureDate.....

Designation