

Bharat Heavy Electricals Limited

Boiler Auxiliaries Plant

Ranipet – 632 406 . India

Civil Projects & Services Department

TENDER DOCUMENT (PRICE BID)

Name of work : Formation of Road in Zone III western side of Reservoir in BHEL Township, Ranipet – 6 Vellore District , Tamil Nadu.

Tender Notice No. : BAP:CF:02/2011-12 Dated 06.04.2011

Estimated Value Rs. 251 lakhs

Period of Contract : **6 Months**

Issued to :

SIGNATURE OF THE APPLICANT



BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Unit : BOILER AUXILIARIES PLANT
RANIPET - 632 406.

CIVIL PROJECTS & SERVICES DEPARTMENT

To

The Tenderer

Dear Sirs,

Sub: **Formation of Road in Zone III western side of Reservoir in BHEL Township, Ranipet – 6 Vellore District , Tamil Nadu.**

Ref: 1. Tender Notice No. BAP:CF:02/2011-12 dated 06.04.2011
2. Tender Schedule No.

Please find enclosed / attached non-transferable tender document containing
I) Qualification bid consisting, Preamble, Specifications, General Conditions of Contract, Norms for Qualification, Pro forma and Work & safety procedure
ii) Price bid consisting of Preamble, Instruction to Tenderers, Bill of Quantities to offer your most competitive rates for all the items, drawings, Schedules A,B,C,D&E.

Tender for the work should be submitted in a sealed cover consisting of three inner sealed covers such as I) EMD cover ii) Qualification bid cover & iii) Price bid cover, all superscribing the name of work, tender schedule number, the contents etc.

- 1) **EMD cover shall contain requisite EMD in the form of DD.** Tenderers who had already remitted one time EMD should furnish the details of cash receipt No._____ dt. _____, on the top of EMD cover. Tender without EMD / without reference to one time EMD will be summarily rejected and the respective qualification bid shall not be opened.

In case of tender documents downloaded from website, tender shall accompany the tender cost of Rs.750/- in the form of Demand Draft (separate) in addition to the EMD amount in the form of Demand Draft.

All Demand Draft shall be drawn in favour of **BHEL, BAP**, payable at **Ranipet**.

- 2) Qualification bid cover shall contain duly filled in qualification bid document signed by the tenderer in all the pages with documentary evidences for pre-qualification such as experience, value of work executed in the similar nature of work, etc. Any bid without proper documentary evidence for pre-qualification shall not be considered for further evaluation.

- 3) The Price Bid cover shall contain price bid document duly filled in and signed by the tenderer in all the pages. **The tenderer has to quote most competitive rates for all the items in the Bill of Quantities.**

The completed qualification bid and price bid along with requisite EMD of **Rs.2,00,000/-** for the work in the form of Demand Draft in favour of BHEL, Ranipet shall reach the office of the undersigned on or before **10.06.2011 at 15.00 hrs.** EMD in any other form will not be accepted. The qualification bid will be opened on the **same day at 15.00 hrs.** In case of opening day falls on holiday or happened to be declared as a holiday, the receipt and opening of the tender shall automatically fall on the same timing of the next working day. Date and time of opening of the Price Bid shall be intimated only to the bidders those who have qualified after evaluation of the qualification bid. You / your authorized representative may participate in the tender opening.

Clarification if any, can be obtained contacting following phone No. 04172 –284995 / 284087 Mobile: 9443389051. Tele Fax No. : 04172 – 242026. Email: ccdurai@bhelrpt.co.in

Kindly acknowledge the receipt of the entire set of tender document.

Thanking you,

Yours faithfully
For and on behalf of
BHARAT HEAVY ELECTRICALS LIMITED,

DY. MANAGER / CIVIL PROJECTS & SERVICES

**BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 406**

CIVIL PROJECTS & SERVICES DEPARTMENT

PREAMBLE

01. The scope of work includes **Formation of Road in Zone III western side of Reservoir in BHEL Township, Ranipet – 6 Vellore District , Tamil Nadu.**
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 does not include cost of cement, reinforcement steel , structural steel , Cast Iron pipes, Cast Iron Specials and accessories etc., which will be issued at free of cost at BHEL stores. However excess consumption up to 5% over and above theoretical consumption will be recovered at the recovery rate mentioned below.

Cement	-	Rs 6325 / MT
Reinforcement Steel	-	Rs 41975 / MT
Structural Steel	-	Rs 46500 / MT
04. The tenderers are advised to visit the plant area near Ranipet , Vellore (Dt.) and get themselves acquainted with the site conditions before submitting the offer.
05. The works executed in their 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
06. 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.
07. Dissimilar / irrelevant works will not be considered for eligibility criteria.
08. Documentary evidences (Xerox copies - attested) for turnover, works experience, Sales Tax registration etc., all as indicated & required in the tender document should be furnished without which it will not be taken into account.
09. Quoted rate shall be firm throughout the contract period and no cost escalation is allowed on any account. **The quoted rate shall be valid for 3 months from the date of opening of the technical bid.**
10. The percentage 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.
11. 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.
12. 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.
13. 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.

CONTRACTOR

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ACCEPTING OFFICER

14. 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.
15. 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.
16. 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. Road rammer
 - b. Hot mixing plant
 - c. Heat master
 - d. Petrol / Kerosene driven vibrator/ mechanical vibrator
 - e. Cube moulds
 - f. Inter carting vehicle (tractor, hand trolley etc)
 - g. Mobile / Hydraulic crane
 - h. Welding machine etc.
 - i. Steel shuttering
 - j. Pipe scaffolding
 - k. Slip form Shuttering & Allied Material
 - l. Road roller etc.,
17. 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.
18. 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.
19. 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.
20. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
21. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
22. The contractor shall strictly adhere to various labour laws in force.
23. 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.
24. The contractor should submit the programme for the completion of work (bar chart with different activity) and the list of machineries and site personnel to be deployed for the work along with tender.
25. 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.
26. 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.
27. 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:

Civil Engineer (Graduate in Civil Engineering) - 1 No.
Supervisor/Engineer (Diploma Holder) - 1 No.

28. In addition to the above, Quantity surveyors have to be engaged to prepare measurements and submit the bills.
29. Adequate number of Quality Engineer and qualified Safety Engineer should be deployed at site.
30. **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.**
31. 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.
32. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex.
33. Exclusive Stores personnel should be engaged who would co ordinate with department official for clearance and collection of BHEL supplied materials required for works.
34. Separate non-technical persons should be engaged for arranging daily gate passes for labours and vehicles entry in all the gates of Factory Complex.
35. 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.
36. 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.
37. All the works shall be executed as per the standard specifications as provided in TNBP / BIS / IRC / MORTH.
38. All the materials to be used in the work and the nature of work shall conform to the respective TNBP & BIS and National Building Organization, 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.
39. 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 Organization at any time.
40. 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.
41. The contractor should use only the materials of brand and quality as approved by BHEL.
42. All materials and consumables brought by the contractor should have manufacturer's certificate.
43. 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.
44. 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.

45. 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.
46. 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.
47. 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.
48. 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.
49. 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. BHEL will provide water at free of cost by identifying the water source (Open well) within the BHEL premises subject to availability and the contractor has to make their own arrangement for pumping the water from well and using the same after ensuring the suitability for the purpose. In case BHEL is not able to provide water as stated above, the contractor has to make their own arrangement for bringing the required quality of water at their own cost from outside BHEL premises for construction & testing purpose.
50. The contractor has to make their own arrangement for the required power supply for the execution of work. However BHEL will issue No-Objection Certificate for getting the temporary power service connection if required. 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.
51. 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
52. 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.
53. 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, Ranipet.
54. Bank Guarantee format can be obtained after award of work in case of successful tenderer.
55. No advance / mobilization advance will be given.
56. LD / Penalty clause is applicable as per General Conditions of Contract in force.
57. BHEL reserves its right to accept / reject any or all the tenders without assigning any reasons.
58. 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.

Scope of work

The scope of work is as specified in the bill of quantities.

Schedule of Payment

No advance payment is entertained. Payment will be made progressively for the work done as on date. On each stage of 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.

Force Majeure clause: If at any time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by BHEL subject to prompt notification by the tenderer to BHEL of the particulars of the events and supply to the BHEL if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

The correspondence exchanged against the tender from both tenderer and BHEL through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.

Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the patties to the business.

Tenderers participating in the tender should declare in their technical bid that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to BHEL. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of BHEL about any such hold under enforcement on the subject bidder, BHEL will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalization of the subject tender irrespective of the status of the subject bidder in that tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any ongoing tenders even if participated till the hold is officially lifted and confirmed in writing.

GENERAL AND SPECIAL CONDITIONS OF CONTRACT
GENERAL CONDITIONS

1. No night work will be permitted without the written permission of the Engineer – in – charge.
2. Bulkage test on the sand to be used on the work should be conducted periodically to arrive at the correct quantity of sand to be mixed for the different proportions as and when required.
3. Items of work other than those mentioned in the Bill of Quantities (Tender Schedule) attached hereto will be carried out at the rates to be fixed by this organization as per relevant clauses of the General Conditions of Contract.
4. **a)** 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. BHEL will provide water at free of cost by identifying the water source (Open well) within the BHEL premises subject to availability and the contractor has to make their own arrangement for pumping the water from well and using the same after ensuring the suitability for the purpose. In case BHEL is not able to provide water as stated above, the contractor has to make their own arrangement for bringing the required quality of water at their own cost from outside BHEL premises for construction & testing purpose.

b) The contractor has to make their own arrangement for the required power supply for the execution of work. However BHEL will issue No-Objection Certificate for getting the temporary power service connection if required. The contractor has to mobilize DG set of suitable capacity at the contractor's own cost for uninterrupted progress of the work in case of non availability of power from the grid.

c) 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.
5. Permission for erection of temporary work sheds etc., at site will have to be obtained from BHEL in writing in advance.
6. The works contract to be entered into with the successful tenderer will be governed by the BHEL revised General Conditions of Contract in force.
7. The successful tenderer / Contractor shall observe all safety regulations and take necessary safety precaution as called for under the "BHEL General Conditions of Contract and Safety Precautions" enclosed herewith.
8. In all matters of dispute, the decision of the General Manager, Bharat Heavy Electricals Ltd., Ranipet – 632 406 shall be final and binding on the tenderer / contractor.
9. All the materials to be used in the work and nature of work shall conform to respective TNBP, IS and National Buildings Organization, IRC / MORTH Standard Specifications and shall be got approved by the Engineer – in – charge before actual incorporation in the work
10. All surplus raw steel remaining with the contractor shall be returned to BHEL stores at his own cost after completion of fabrication, in the form of full lengths, useful cut bits and scrap. The following yardstick will be adopted for the purpose of classification of scrap.

(a) Mild steel and alloy Steel plates and sheets	1000X500mm and above	Useful cut bit
(b) Mild steel and alloy Steel plates and sheets	Less than 1000 X 500 mm	Scrap
(c) Structural	One metre and above in length	Useful cut bits
(d) Structural	Less than one metre in length	Scrap

The invisible (Non-returnable) wastage should not exceed a maximum of 2% by weight of fabricated steel work and returnable wastage generated by way of scrap or useful cutbits shall be returned at "Actuals". Maximum permissible limit for scrap without recovery shall be 5% of actual fabricated quantity. However every care should be taken to see that raw

steel is utilized most economically by preparing necessary cutting lists to restrict the scrap within the permissible limit.

Should the quantum of invisible wastage exceed the 2% permissible limit, RECOVERY AT TWICE THE VALUE OF the extra tonnage involved (which will be evaluated on an average cost per tonne basis considering the total raw steel materials issued) will be effected from the contractor for the excess quantity involved (**2 times x Rs. 46,500 = Rs.93,000 / MT + applicable taxes**).

The Contractor shall submit a material tallying statement on completion of the work indicating the details of quantities of each material (section by section) received quantities used for fabrication as per DOD lists. Quantity returned in full length, useful cut bits and scrap and the quantity reckoned as invisible wastage.

- | | | |
|--|---|---|
| a) Single recovery rate for the non returned scrap upto 5% of actual consumption | : | Rs. 46,500/- per M.T
+ applicable taxes |
| b) The punitive recovery rate for steel qty. not accounted and extra scrap generated beyond 5% of actual consumption | : | Rs. 93,000/- per M.T.
+ applicable taxes |

SPECIAL CONDITIONS OF CONTRACT

1. Unless otherwise indicated in the Bill of Quantities cement, structural steel sections, reinforcement steel (MS rods, CTD bars etc.) and other items (as mentioned in Schedule B) will be issued at BHEL Stores at free of cost. The Contractor's quoted rates shall therefore be inclusive of the cost of conveyance of these items from BHEL Stores to site of work including, loading, unloading and other incidental costs etc. The quantities of each items to the extent required for actual incorporation of the work will be treated as ISSUED FREE OF COST.
2. All surplus reinforcement rod with the contractor shall be returned to BHEL Stores at his own cost in the form of full lengths, useful cut bits and scrap. The invisible (non-returnable) wastage should not exceed a maximum of 0.5% of the actual quantity consumed in the work.
3. The contractor shall return all the scrap to the disposal stores at his own cost. Bent rods will also be taken as scrap only, irrespective of their length. The maximum permissible limit of scrap without recovery is 5% of actual consumption. The recovery details for the materials are as follows:
 - a) **Single recovery rate for the non returned scrap upto 5% of actual consumption** : **Rs.41,975/- per M.T + applicable taxes**
 - b) **The punitive recovery rate for steel qty. not accounted and extra scrap generated beyond 5% of actual consumption** : **Rs.83,950/- per M.T. + applicable taxes**

Excess consumption of cement over and above the theoretical requirement as per BHEL Data up to a limit of 5% will be charged at the rate of Rs.6,325/per M.T. + applicable taxes. Consumption beyond 5% will be charged at the punitive recovery rate of Rs.12,650/per M.T.. + applicable taxes.
4. The Contractor should maintain proper accounts of cement, MS rods / CTD bars, structural steel sections ,Cast Iron Pipes, Specials and other materials if any supplied by this organization and these should be available at the site of the work for verification and check by the official of his organization at any time.
5. 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
6. The Manager / Civil or his duly authorized representative shall have all reasonable times access to Contractor's premises of work and shall have the power at all the reasonable times to inspect and test any portion of the work or examine the materials and workmanship of the structures during their manufacture and test. The contractor shall give due notice in writing to the Inspecting Engineer of BHEL when the materials supplied to be incorporated in the work are ready for Inspection and test. No material shall be incorporated in the work until the inspecting Engineer certified in writing that such materials have been inspected and approved by him.
7. The contractor should submit in advance every fortnight a detailed programme of work to be undertaken from time to time strictly in conformities with the "Time and Progress Chart" covering the entire constructed work and reschedule them wherever necessary during the progress of the work so as to achieve the target set. Periodical progress reports of every fortnight should also be furnished by the Contractor regarding the collection of materials issued and to be issued from BHEL Stores and other relevant information as asked for by the Engineer-in-charge and other BHEL Officers-in-charge of the work.
8. 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.

GENERAL SAFETY PRECAUTIONS TO BE FOLLOWED AT WORK SITE DURING EXECUTION

The following safety measures should be strictly adhered to during execution of works at sites.

1. Providing the working platform with toe board and handrail for continuous working at heights.
2. Providing safety belt and life line at all times for men working at heights.
3. Providing dust or fume respirator in places where dust and fume concentration exists.
4. Providing goggles and welding screens.
5. Providing acid and alkali proof rubber gloves for handling acid and alkali and chemical which are corrosive.
6. Providing rubber gloves for working on electrical works.
7. Ensuring proper lashing of the components while being transported in vehicles.
8. The vehicles must have side supports or have body to support the materials conveyed.
9. The materials should not be allowed to extend or overflow the sides of the vehicles.
10. Materials should not be allowed to overhang from the rear edge of the body of the vehicle.
11. Driver of the vehicle must possess license.
12. Vehicle must not be overloaded prescribed limits.
13. Red flags and lights for parts projecting from the body of vehicle must be provided.
14. The speed restrictions within the factory premises must be strictly adhered to.
15. The gas cylinders must be always handled on trolleys or kept tied down not in use. They should never be rolled as Roller for conveying.
16. Cylinders should not be used without regulators.
17. All excavations must be barricaded and red lamps / tapes must be provided.
18. All electrical connections must be properly earthed.
19. No work should be taken up for execution inside shop floor, without obtaining necessary work permit.
20. Providing helmet, safety belt, safety shoes etc., for high level work and sufficient number of Industrial Safety nets at appropriate level to safeguard the persons working at high level particularly in trusses, girders, roofing etc., of industrial and high roof buildings.
21. The contractor should maintain a register regarding the driver license particulars.
22. All personal protective equipment conform with standard specification as per the details given in the code of conduct.

Contractor including their sub contractors, agents and labour engaged on the work are required to scrupulously adhere to the safety regulations, safety precautions and measures. Any violation thereof will invite punitive action being taken against them. Also contractors with frequent violations of safety regulations will not be entrusted with further work in this organization.

SCHEDULE 'A'

LIST OF WORKS AND PRICES

NAME OF WORK: Formation of Road in Zone III western side of Reservoir in BHEL Township, Ranipet – 6 Vellore District , Tamil Nadu.

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.	Formation of Road in Zone III western side of Reservoir in BHEL Township, Ranipet – 6 Vellore District , Tamil Nadu.	Rs. 251 Lakhs		6 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

SCHEDULE 'B'

LIST OF FREE ISSUE MATERIAL FROM BHEL STORE

Sl.No	Name of Material
1	Cement
2	Reinforcement steel
3	Structural steel

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
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.....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

14

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
		C10-1831-0-1P1-200 Township layout

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

AUTHORITY TO TENDER

Tender Notice No.

Office of the
ADDL.GEN. MANAGER / CIVIL /PROJECTS &
SERVICES,BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 406.

Tender Schedule No.

Item rate tender for work required Formation of Road in Zone III western side of Reservoir in BHEL Township, Ranipet – 6 Vellore District , Tamil Nadu.

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 /PROJECTS & SERVICES Bharat Heavy Electricals Limited Unit, Boiler Auxiliaries Plant, Ranipet – 632 406, **up to 15.00 hrs. on 10.06.2011** addressed to the Manager / Civil / Projects & Services , BHEL. Boiler Auxiliaries Plant , Ranipet – 632 406, super scribing 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/ Projects & Services
Bharat Heavy Electricals Limited
Unit : Boiler Auxiliaries Plant
Ranipet – 632 406.

I / We hereby offer to carry out the **Formation of Road in Zone III western side of Reservoir in BHEL Township, Ranipet – 6 Vellore District , Tamil Nadu.**

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

..... 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 : Boiler Auxiliaries Plant , Ranipet – 632 406.

for a sum of Rs.....
.....
.....

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

SignatureDate.....

Designation



BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

ESTIMATE

ESTIMATE REF NO : CF/C/10/64

NAME OF WORK : FORMATION OF ROAD IN ZONE III- WESTERN SIDE OF RESERVOIR IN TOWNSHIP

[AMOUNT IN Rs.]

CPWD 2007 REF	SLNO	DESCRIPTION	QTY	UNIT	RATE RS P	AMOUNT RS P
2.2	01	Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods watering, rolling each layer with 2 tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead upto 50 m and lift upto 1.5 m :				
2.2.1	01A	All kinds of soil	6720.000	cum	157.55	1058736.00
16.1	02	Preparation and consolidation of sub grade with power road roller of 8 to12 tonne capacity after excavating earth to an average of 22.5 cm. depth,dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto 50 metres.	43000.000	sqm	33.90	1457700.00
16.2	03	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	3600.000	cum	4.50	16200.00
16.3	04	Supplying and stacking at site.				
16.3.9	04A	Good earth.	7350.000	cum	144.05	1058767.50
16.3.2	04B	63 mm to 45 mm size stone aggregate.	4050.000	cum	768.45	3112222.50
16.3.6	04C	Stone screening 13.2 mm nominal size (Type A).	580.000	cum	892.25	517505.00
16.4	05	Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, hand picking , rolling with 3 wheeled road / vibratory roller 8-10 tonne in stages to proper grade and camber, applying and brooming requisite type	43000.000	cum	192.55	8279650.00

CONTRACTOR/ TENDERER

ACCEPTING OFFICER



BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

ESTIMATE

ESTIMATE REF NO : CF/C/10/64

NAME OF WORK : FORMATION OF ROAD IN ZONE III- WESTERN SIDE OF RESERVOIR IN TOWNSHIP

[AMOUNT IN Rs.]

CPWD 2007 REF	SLNO	DESCRIPTION	QTY	UNIT	RATE		AMOUNT	
					RS	P	RS	P
		of screening / binding material to fill up interstices of coarse aggregate watering and compacting to the required density .						
2.8	06	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.						
2.8.1	06A	All kinds of soil.	10.000	cum	103.40		1034.00	
2.25	07	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	80.000	cum	45.70		3656.00	
2.27	08	Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming consolidating and dressing complete.	60.000	cum	301.50		18090.00	
2.33	09	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable material and disposal of unserviceable material.						
2.33.1	09A	Beyond 30 cm girth upto and including 60 cm girth	50.000	each	81.70		4085.00	
2.33.2	09B	Beyond 60 cm girth upto and including 120 cm girth	10.000	each	359.80		3598.00	
16.72	10	Supplying and stacking of hard stone (for stone pitching) 22.5 cm thick at site.	3010.000	cum	458.35		1379633.50	
16.73	11	Dry stone pitching 22.5cm thick laid in courses and required profile with hammer dressed stones having no side less than 15 cm, with minimum	13100.000	sqm	96.60		1265460.00	

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BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

ESTIMATE

ESTIMATE REF NO : CF/C/10/64

NAME OF WORK : FORMATION OF ROAD IN ZONE III- WESTERN SIDE OF RESERVOIR IN TOWNSHIP

[AMOUNT IN Rs.]

CPWD 2007 REF	SLNO	DESCRIPTION	QTY	UNIT	RATE RS P	AMOUNT RS P
		depth of 20cm including preparing the bedding surface etc. all complete.(Payment for Stone to be made separately)				
13.33	12	Pointing on stone work with cement mortar 1:3 (1 cement: 3 fine sand) :				
13.33.1	12A	Flush/ Ruled pointing	13100.000	sqm	56.45	739432.78
19.6	13	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
19.6.7	13A	600 mm dia. R.C.C. pipe	120.000	metre	878.54	105424.80
19.6.11	13B	1000 mm dia. R.C.C. pipe	144.000	metre	1712.49	246598.20
4.1	14	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
4.1.3	14A	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	200.000	cum	1601.45	320290.00
4.1.9	14B	1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	2.000	cum	1416.40	2832.80
1.1.2	15	Carriage of earth by mechanical transport including loading, unloading, levelling the earth for forming the embankment upto a lead of 1 KM as directed by the Engineeri - in - charge.	4000.000	CUM	49.42	197680.00
5.37	16	Providing and laying in position ready mixed concrete manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including	10.000	cum	4356.50	43565.00

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BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

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ESTIMATE

ESTIMATE REF NO : CF/C/10/64

NAME OF WORK : FORMATION OF ROAD IN ZONE III- WESTERN SIDE OF RESERVOIR IN TOWNSHIP

[AMOUNT IN Rs.]

CPWD 2007 REF	SLNO	DESCRIPTION	QTY	UNIT	RATE		AMOUNT	
					RS	P	RS	P
		pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. M-25 grade Reinforced cement concrete by using 410kg of cement per cum of concrete. All works up to floor V level.						
5.39	17	Extra for carriage of R.M.C. beyond the initial lead of 10km.	400.000	CUM/KM	20.90		8360.00	
5.9	18	Centering and shuttering including strutting, propping etc. and removal of form for :						
5.9.1	18A	Foundations, footings, bases of columns, etc. for mass concrete.	100.000	sqm	119.25		11925.00	
5.22	19	STEEL REINFORCEMENT Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.						
5.22.3	19A	Cold twisted bars	1500.000	kilo	6.19		9285.00	
5.2	20	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement :						
5.2.2	20A	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	10.000	cum	2022.35		20223.50	
7.1	21	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1						

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BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

ESTIMATE

ESTIMATE REF NO : CF/C/10/64

NAME OF WORK : FORMATION OF ROAD IN ZONE III- WESTERN SIDE OF RESERVOIR IN TOWNSHIP

[AMOUNT IN Rs.]

CPWD 2007 REF	SLNO	DESCRIPTION	QTY	UNIT	RATE		AMOUNT	
					RS	P	RS	P
		cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :						
7.1.1	21A	Cement mortar 1:6 (1 cement : 6 coarse sand)	10.000	cum	1411.96		14119.63	
4.10	22	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	5.000	sqm	76.88		384.38	

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BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

ESTIMATE

ESTIMATE REF NO : CF/C/10/64

NAME OF WORK : FORMATION OF ROAD IN ZONE III- WESTERN SIDE OF RESERVOIR IN TOWNSHIP

[AMOUNT IN Rs.]

TOTAL ESTIMATED VALUE BEFORE ESCALATION		19896458.59
ESCALATION @ 26.00 %		5173079.23
TOTAL ESTIMATED VALUE (A)		25069537.82
CONTRACTOR TENDER PERCENTAGE @	ABOVE <input type="checkbox"/>	
	BELOW <input type="checkbox"/>	
	AT PAR <input type="checkbox"/>	_____ % (B) <input type="text"/>
(Percentage in words)		
SUB TOTAL	if above (A) + (B)	(C) <input type="text"/>
	if below (A) - (B)	(C) <input type="text"/>
	if at par (A)	(C) <input type="text"/>
	*SERVICE TAX @ _____ %	(D) <input type="text"/>
SERVICE HEAD :		
TOTAL VALUE OF WORK [(C) + (D)]		(E) <input type="text"/>
(Rupees in words)		

- NOTE :**
- 1) Instead of subtraction (for tender % quoted below), Total value of work is calculated by addition erroneously, L1 will be decided based on amount arrived by subtraction only. In the same way, instead of addition (for tender % quoted above), Total value of work is calculated by subtraction erroneously, L1 will be decided based on amount arrived by addition only. Any calculation error will be corrected at actuals.
 - 2) Tick whichever is applicable. In case of omission in Ticking, figures indicated in the amount column will be considered.
 - 3) Boxes 1,2,3 any one box is to be ticked as per quote. Boxes 5,6,7 any one box is to be filled in with appropriate figures. Box 9 value is equal to Box 5 or 6 or 7 plus box 8.
 - *4) Service Tax at applicable percentage shall be quoted by tenderers. In case Service Tax at composite rate quoted, it will be applicable on BHEL free issue of materials also. In case Service Tax % or Service tax amount is not mentioned, it is presumed that service tax at normal rate is included in the quoted rate.
 - 5) If any discrepancy between figures & words, L1 will decided based on words.

6) The Value of BHEL free issue materials is Rs. 4,98,433.28.

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BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

ESTIMATE

ESTIMATE REF NO : CF/C/10/64

NAME OF WORK : FORMATION OF ROAD IN ZONE III- WESTERN SIDE OF RESERVOIR IN TOWNSHIP

[AMOUNT IN Rs.]

SPECIAL CONDITION

CONTRACTOR/ TENDERER

ACCEPTING OFFICER

SPECIAL CONDITIONS OF CONTRACT

1. The tenderer shall quote a percentage above or below or at par, the rates shown in the Bill of Quantities based on CPWD DSR 2007. The percentage quoted shall be clearly written both in words and figures.
2. The quoted percentage will apply to the individual items uniformly.
3. The above rate does not include PF & ESI remittance. The tenderer shall quote inclusive of PF & ESI contribution to their workers.
4. Items of work other than those mentioned in Bill of Quantities will have to be carried out at the rates to be fixed by this organization. The same offered percentage will be applicable with reference to CPWD DSR 2007.
5. Water will be supplied at one point on chargeable basis @ 1% of the contract value, Power will be provided at one terminal point on commercial tariff plus applicable taxes, the contractor has to make their own arrangement for tapping the same with necessary tools & tackles and compressed air will be provided free of charges from the nearest tapping point subject to availability. The contractor should make necessary arrangement for tapping the same. In case BHEL is not able to provide the above facilities, contractor has to make his own arrangement for completion of the work at their own cost.
6. Safety precautions should be taken while doing the work. You will have to follow all safety requirements to carry out the work inside the factory premises.
7. All materials shall conform to the latest IS/IRC specifications
8. All the works to be carried out strictly as per the specifications laid down in Tamil Nadu Building practice and also satisfying relevant IS/IRC specifications.
9. Cement, Reinforcement steel, Structural steel and AC sheets will be issued free of cost for theoretical consumption and at a recovery rate of Rs. 6,325.00 / MT Rs. 41,975.00 / MT Rs. 46,500.00 / MT and Rs. 140.00 / Sqm respectively up to 5% over and above the theoretical consumption and beyond which penal recovery will be effected at the double the rates specified above.
10. Once the work is completed the contractor should remove all the unwanted materials from the site time to time and it should be disposed off as per the instructions of Engineer-in-charge without any further delay.

11. All the rates are inclusive of scaffolding charges, sundries & contingencies, carriage of materials, cost of brush, sand paper, ladder, gum, putty, turpentine, caustic soda or washing soda, mixing charges etc., complete.
12. All works shall be carried out as per standard specifications and instructions of Engineer-in-charge.
13. Base preparation, mixing ratio, etc. shall be as per the recommendations of the manufacturer.
14. All materials, colour, shade, brand, etc. shall be got approved from the Engineer-in-charge before the start of the work and shall confirm to the latest IS/IRC specifications.
15. The contractor has to ensure payment of minimum wages for different category; of workers as announced by Tamil Nadu State Government / BHEL from time to time.
16. Coefficient of consumption for paint, distemper, cement, etc. shall be as per CPWD 2007 data.
17. The contractor shall have to follow all statutory requirements like PF, ESI, etc., throughout the contract period.
18. The General conditions of contract in force shall apply to this contract.
19. The contractor is required to engage a Degree / Diploma holder Engineer throughout the contract period.
20. Time is essence of the contract. Any delay beyond the delivery date will be subjected to LD.
21. The tenderer may visit the site and assess the prevailing conditions before quoting the rate.

22. CONTRACT CONDITIONS ON TAXES & DUTIES

- a) The Tenderer shall have been Registered under Excise, Sales Tax, Tamil Nadu VAT, Service Tax regulations if applicable and provide a copy of such registration to BHEL as part of the tender document. In case of fresh registration/amendment thereon, the same shall be carried out before start of the work. PAN no shall be submitted as part the tender document. (copy to be enclosed)

- b) Service Tax shall be paid by the service provider namely the Tenderer.
- c) Required Tax Invoice as per the existing provisions to be issued in required parts duly signed by the Competent/Authorized Official of the Contractor to BHEL
- d) If due to deficiency in the document submitted, BHEL could not avail CENVAT, VAT Credit, the credit amount will be recovered from the amount due to the Tenderer.
- e) If the payment of statutory dues are not made in accordance with the applicable provisions of the relevant Act within the time specified and Penalty, Interest etc paid/payable by the Contractor, the same shall not be reimbursed by BHEL and the entire implication is only to be borne by the Contractor. The Tenderer shall clearly indicate the rate of applicable taxes and duties for the work to be executed.
- f) The Tenderer shall indicate all exemptions on account of threshold limits or special notification under any statute. Any modification thereon shall also be intimated immediately on changes.
- g) The quote submitted shall include all taxes and duties of whatsoever in nature but exclusive of Service Tax which shall be quoted separately if applicable. The existing rate shall be quoted clearly. If reduced rates are applicable on account of material, labour if any the same shall be indicated clearly. After tender opening addition of any tax & duty is not admissible.
- h) If any composition scheme is to be availed by the Tenderer, the all relevant terms and conditions shall be indicated clearly in the offer. The required compliance under relevant statute shall be carried out.
- i) Any statutory variation will be to the account of BHEL. But if the variation is effective during the delayed/extended period of execution for reasons attributable to the vendor, the same shall be borne by the vendor only.