

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

TENDER DOCUMENT (PRICE BID)

Name of work : Construction and expansion of additional shop floors, machine foundation, RCC framed structure and other infrastructure works in Block-II and System Bender Shop area in New Plant.

Value of work : Rs. 3076 Lakh

Tender Notice No. : 05/09-10

Tender Schedule No. : 14/09-10

Period of Contract : 18 Months

Issued to :

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

CIVIL ENGINEERING DEPARTMENT (FACTORY)

PREAMBLE

01. The scope of work includes **Construction and expansion of additional shop floors, machine foundations, RCC framed structure and other infra structure works in Block-II and System bender Shop area in New plant.**
02. The tender value excludes cost of cement, reinforcement steel & structural steel which will be supplied by BHEL at Stores at free of cost. Other free issue materials by BHEL are indicated in Schedule B of the Price bid document.
03. Time is the essence of the contract. Being a time bound expansion scheme with capital expenditure, the contractor should make all efforts to complete the work in time. Even though the overall completion period is indicated as **18 months**, the shop floor and other works shall be completed progressively and handed over as per agreed split up schedule.
04. The tenderers are advised to visit BHEL Factory at Tiruchrappalli and get themselves acquainted with the site conditions before submitting the offer.
05. The following eligibility criteria shall be complied to fulfill the Qualification Bid:-
 - a) **Contractor should have separate Registration Code No. for EPF, ESI & Sales Tax.**
 - b) Average annual financial turnover of similar works in the last three years should be 30% value of respective work .
 - c) During last seven years should have successfully completed works either
 - i) Three similar works each not less than 40% value of respective work .
 - or
 - ii) Two similar works each not less than 50% value of respective work.
 - or
 - iii) One similar work not less than 80% value of respective work.
 - d) Solvency shall be produced for at least 40% value of respective work.
 - e) Value of Structural steel works completed in last 3 years should be atleast 30% value of the minimum required annual turn over.
06. The works executed in the own name of the tenderer only will be considered for eligibility criteria.
07. Dissimilar / irrelevant works will not be considered for eligibility criteria.
08. Documentary evidences (Xerox copies - attested) for turnover, works experience, P.F, ESI & 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. The value of turnover and the value of similar works mentioned above excludes cost of cement, reinforcement steel and structural steel. However if the turnover value furnished by the tenderer includes the above materials, then the tenderer has to furnish the cost of the same separately. If it is not furnished, the materials cost will be presumed as follows: -

Civil & structural works combined	- 50 %
Civil works alone	- 35 %
Structural works including cloaking items	- 70 %
Other minor maintenance works	- 20 %

10. The norms for qualification with prescribed score is attached in the Qualification Bid Document. Evaluation will be done accordingly. Minimum score required for qualification is 60.
11. For the agencies who had already been qualified and enlisted by BHEL under various money category. Tender document for the eligible value of work can be obtained after paying the cost of tender document. Already enlisted and eligible agencies may submit the tender document duly signed in all pages and no Technical evaluation is applicable for item.
12. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 20% (twenty percentage).
13. Quoted rate shall be firm throughout the contract period of **18 months** and no cost escalation is allowed on any account.
14. The item 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 reimbursed on production of valid document proof for having paid service tax by the contractor.**
15. Some changes are likely in the quantities furnished as well as 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 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 drawings released then and there, 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. (From page No. 19 to 71).**
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. **After award of work the contractor has to furnish the security deposit, as per Clause 13 of Tender Notice, attached in the Price Bid. 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, Paver, Road Roller, 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) Precise Leveling instruments and theodolite.
 - b) Full load mixture machine / mini batching
 - c) Petrol / Kerosene driven vibrator/ mechanical vibrat
 - d) Cube moulds
 - e) Inter carting vehicle (tractor, hand trolley etc)
 - f) Hydra cranes
 - g) Power operated winches
 - h) Mobile / Hydraulic crane
 - i) Welding machine etc.
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. The contractor has to execute any item of work irrespective of the quantity available in the tender without any reservation till the contract value does not vary more than 20%.
25. 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.
26. 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.
27. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
28. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
29. The contractor shall strictly adhere to various labour laws in force.
- 30.. The contractor has to submit the 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.
31. 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.
32. The contractor should establish his own site office, fabrication yard, handling facility, storage facility to stock about 300 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 co-ordinator | - | 1 No. |
| Qualified Surveyor | - | 1 No. |
| Civil Engineer (Graduate in Civil Engineering) | - | 2 Nos. |
| Structural Engineer (Graduate in Mechanical / Civil Engg.) | - | 2 Nos. |
| Supervisor/Engineer (Diploma Holder) | - | 4 Nos. |
| Level-II NDT Inspector | - | 1 Nos. |

In addition to the above, Quantity surveyors have to be engaged to prepare measurements and submit the bills.

34. Adequate number of Quality Engineer and qualified Safety Engineer should be deployed at site. Experienced Engineers / Supervisors are to be engaged in Railway and water supply works.
35. To safeguard the persons working at height in roof, wall etc., sufficient number of Industrial Safety nets 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.
36. 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.
37. Expertised labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing etc. and work experienced persons shall be engaged for fabrication, water supply, railway track laying and aligning works, sewerage system work, etc.
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 "ispatch" ing and these 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. Compressed air alone will be provided at viable locations at free of cost by BHEL. From that point the contractor has to provide further arrangements for site works.
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 factory with proper invoice / voucher and make necessary entry in the security gate. They should maintain proper record for tools and plants, materials, etc., brought inside the factory complex.
52. The contractor should extend fullest 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. On the written request from the contractor **Water required for the work may be provided by this organization at only one point at the site of the work at free of cost.** In case of failure of water supply, the Contractor will have to make his own arrangements for water without any extra claims until supply is restored. BHEL does not accept any liability whatsoever for non-supply or delay in the supply of water under any circumstances. The contractor shall ensure that there is no wastage of water otherwise supply of water is liable to be stopped at contractor's risk and cost.

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 free of cost.** 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.
57. On the written request from the contractor **Compressed air alone will be provided this organization at only one point near the site of work at free of cost.** 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 wherever BHEL is not in a position to supply compressed air.
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 to 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 reject a tender due to unsatisfactory past performance in the execution of a contract at another project/unit awarded against a different enquiry.
65. BHEL reserves its right to accept/reject any or all the tenders and to award the work in full or split to more than one agency without assigning any reasons.
66. 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.

REVERSE AUCTION

BHEL reserves the right to go for a Reverse Auction (RA) instead of Opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions governing RA are given below.

GENERAL TERMS AND CONDITIONS OF RA

Against this tender for the subject work/system with detailed scope of work as per tender specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE" i.e., ON LINE BIDDING ON INTERNET.

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
3. BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact & get trained.
4. Reverse Auction rules like event date, time, Start price, bid decrement, extensions etc. also will be communicated through service provider for compliance.
5. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to Participate in the event.
6. BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Taxes and Duties, Freight charges, Insurance and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction.

However if the service tax is applicable for this contract, the same will be reimbursed on production of valid document proof for having paid service tax by the tenderer.

7. Reverse auction will be conducted on scheduled date & time.
8. At the end of Reverse Auction event, the lowest bidder value will be known on the network.
9. The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.
10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice.
12. BHEL reserves the right to negotiate if need be, with the "L1" vendor of the Reverse Auction

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.

In case Letter of Intent (LOI) is issued through email, the PC generated time and date of mail shall be construed as the official time and date of release of LOI. In as much as this date is within the last date of validity given by the bidder the LOI is said to have been issued within the validity period and shall be biding on both the parties 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 finalisation 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 on going tenders even if participated till the hold is officially lifted and confirmed in writing.



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 : Construction and expansion of additional shop floors, machine foundation, RCC framed structure and other infrastructure works in Block-II and System Bender Shop area in New Plant.
02. Estimated Cost : **Rs.3076 Lakh**
03. Earnest Money Deposit : **Rs.2,00,000/-**
04. Completion Time : **EIGHTEEN (18) Months**
(From the date of commencement of the work which will be reckoned from the date of handing over to the Contractor)
05. Cost of Tender Document : **Rs.750/-** (including Sales Tax)
This amount will not be refunded under any circumstances
06. Last Date for Receipt of Tenders : **14.30 Hrs. on 25.01.2010**
07. Date of Tender Opening : **15.00 Hrs. on 25.01.2010**
08. Maintenance Period : 6 (Six Months from the date of actual completion of the entire work and handing over to Bharat Heavy Electricals Limited) (OR) ~~NIL~~

Tender document contains **245** pages in Qualification Bid and **89** pages in Price Bid including Bill of Quantities, Drawing etc.

Issued to Messrs. / Thiru :

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ISSUING OFFICER

CONTRACTOR

ACCEPTING OFFICER

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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 to undertake and carryout the work tendered for or similar work satisfactorily.

NOTE :

- a) Copies of testimonials unless attested 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 and free issue materials, the same will be reimbursed on production of valid document proof 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 endeavour 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 shall commence from the date of receipt of contract the order of acceptance of his tender. The scheduled period of completion for this work will be as mentioned in page No. 01, 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 upto Rs. 2 lakhs	NIL
Works costing more than Rs.2 lakh and upto Rs. 5 lakhs	Rs. 10,000/-
Works costing more than Rs.5 lakhs and upto Rs.10 lakhs	Rs. 20,000/-
Works costing more than Rs.10 lakhs and upto Rs.20 lakhs	Rs. 40,000/-
Works costing more than Rs.20 lakhs and upto Rs.30 lakhs	Rs. 60,000/-
Works costing more than Rs.30 lakhs and upto Rs.50 lakhs	Rs. 1,00,000/-
Works costing more than Rs.50 lakhs and upto 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 of 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 "ispatch" 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 him 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.
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 percentage rate in case the Bharat Heavy Electricals Limited, negotiates for negotiation for reduction of percentage rate. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the percentage 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 Income tax Clearance Certificate from the Income Tax- Officer concerned 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. If the successful tenderer fails to produce the Income – tax clearance certificate within the stated period the Earnest Money Deposit and Security Deposit of the tenderer may be forfeited and the contract terminated.

TENDER NOTICE

NAME OF WORK : Construction and expansion of additional shop floors, machine foundation, RCC framed structure and other infrastructure works in Block-II and System Bender Shop area in New Plant.

ESTIMATED COST : Rs. 3076 Lakh

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 / PLANNING Bharat Heavy Electricals Limited, Tiruchirappalli – 620 014. upto 14.30 Hrs. on **25.01.2010** and will be opened on the same day at 15.00 Hrs. at the Office of the ADDL. GENERAL MANAGER/ CIVIL / PLANNING 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. upto **20.01.2010** 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 **AGM/CIVI/PLANNING (FACTORY)** 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 unalvanized 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. QUANTITIES shown in the attached schedule are only approximate and are liable to variation without entitling the contractors to any variation in the Quoted rates till the total value of the Contract does not vary by more than 20% (twenty percent)
8. 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.
9. 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.
10. The percentage rate quoted in the tender shall remain valid for a period **THREE MONTHS** from the date of opening of tenders.

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. 01 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:

Upto Rs. 10 lakhs	10%
Above Rs. 10 lakhs upto 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.

- 14. 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.
- 15. 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.
- 16. The Bharat Heavy Electricals Limited reserved the right to reject any or all the received or accept any tender or part there of 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.
- 17. Conditional and Unwitnessed 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.
- 18. Tenders not submitted on the prescribed form are liable to be rejected
- 19. The work must be completed within a period as mentioned in page No.8.
- 20. 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.
- 21. This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
- 22. 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 percentage rate all the above factors are to be taken into account.

ISSUING OFFICER

BHEL APPROVED BRANDS FOR THE FOLLOWING MATERIALS / ITEMS

Sl.No.	Material	Manufacturing Co.	Brand
1.	Synthetic Enamel Paint	Asian Berger ICI	Apolite Luxol Dulux gloss
2.	Aluminium Paint	Berger	Berger Aluminium
3.	Interior Emulsion	Asian Berger ICI	Royale Luxol Silk Supercote
4.	Exterior Emulsion	Asian ICI	ACE Supercote
5.	Distemper	Asian Berger ICI	Tractor Bison Maxilite
6.	Cement Paint	Snowcem Agsarcem	Snowcem Agsarcem
7.	A.C. Sheets	Everest India Ltd. Hyderabad India Ltd. Visaka Industries Ltd. Ramco	Everest I Charminar Visaka Ramco
8.	G.I. Pipes	TATA Zenith TNT	TATA Zenith TNT
9.	PVC Pipes	Avonplast Finolex Truebore Vignesh	Avonplast Finolex Truebore Vignesh

SCHEDULE 'A'

LIST OF WORKS AND PRICES

NAME OF WORK: Construction and expansion of additional shop floors, machine foundation, RCC framed structure and other infrastructure works in Block-II and System Bender Shop area in New Plant.

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.	Construction and expansion of additional shop floors, machine foundation, RCC framed structure and other infrastructure works in Block-II and System Bender Shop area in New Plant.	30,76,00,000/- (Rupees thirty crore and seventy six lakh only)		EIGHTEEN (18) MONTHS

BILL OF QUANTITIES

Sl. No.	Appx. Qty.	Description of work	TNBP No.	Rate (Both in Unit fig & Words)	Amount Rs.	Ps.
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AS PER SEPARATE SHEETS ATTACHED CONTAINING **53** PAGES

FROM SERIAL No. **19** to **71**

BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI – 14

BILL OF QUANTITIES

NAME OF WORK: Construction and expansion of additional shop floors, machine foundations, RCC framed structures and other infra structure works in Block II and system bender shop area in New Plant.

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
PART – A (CIVIL WORKS)					
1		Dismantling / removing / demolishing as the case may be and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.			
a)	100.00	Brick work in cement mortar		CUM	
b)	50.00	Stone rubble masonry in cement mortar		CUM	
c)	25.00	Plain Cement Concrete.		CUM	
d)	50.00	RCC works including stacking of steel bars.		CUM	

CONTRACTOR

ACCEPTING OFFICER

19

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
e)	25.00	RCC louvers / RCC jally		SQM		
f)	1400.00	AC sheets from roofs & side cladding including ridges, valleys, gutters etc.,		SQM		
g)	700.00	G I / Aluminum sheets from roofs & side cladding including ridges, valleys, gutters etc.		SQM		
h)	60.00	Steel structures / steel works in built up sections including bolts, nuts, cutting rivets, welding, dismembering, preparation of DODL's etc.,		MT		
i)	50.00	North light glasses at various levels ranging from 9 to 24m.		SQM		
j)	20.00	RCC pipes up to 450mm dia.		RM		
k)	10.00	Bituminous roads		CUM		
l)	10.00	WBM road.		CUM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
2	250.00	Dismantling all RCC Works by any mechanical means/ pneumatic tools and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000m, stacking serviceable materials and unserviceable materials separately including cutting reinforcement bards. All as per instructions of Engineer-in-charge.		CUM	
3		Earthwork excavation (TRENCHES) in soils given below and depositing the excavated earth at suitable places within the initial lead of 50 meter and initial lift of 1.5m for foundation in building works, roads, narrow drains, sewers, bridges, pipe lines etc., sectioning the subgrade to proper level and grade, watering and consolidating the subgrade to receive concrete bed, all as per standard specifications and instructions of Engineer-in-charge.			
a)	7500.00	Hard / dense soil		CUM	
b)	2500.00	Ordinary rock		CUM	
c)	900.00	Hard rock requiring blasting		CUM	
d)	100.00	Hard rock (Blasting prohibited)		CUM	

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
4		Extra for earth work for every additional lift of 1.50m or partthereof.			
a)	3500.00	All kinds of soils excluding rock		CUM	
b)	200.00	Ordinary or hard rock		CUM	
5		Earthwork excavation (TRENCHES) in soils given below and depositing the excavated earth at suitable places within the initial lead of 50 meter and initial lift of 4.5m for foundation in building works, roads, narrow drains, sewers, bridges, pipe lines etc., sectioning the subgrade to proper level and grade, watering and consolidating the subgrade to receive concrete bed, all as per standard specifications and instructions of Engineer-in-charge.			
a)	12000.00	Hard / Dense soil		CUM	
b)	6000.00	Ordinary rock		CUM	
c)	4000.00	Hard rock (requiring blasting)		CUM	
d)	550.00	Hard rock (blasting prohibited)		CUM	

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
6		Earth work for surface excavation in soils given below including disposal of earth at suitable places within a lead up to 50 metres and lift up to 1.5 metre, sectioning the sub grade to proper level and grade. Disposed soil are to be leveled and neatly dressed.			
a)	117000.00	Hard / Dense soil		CUM	
b)	1500.00	Ordinary rock		CUM	
7	550.00	Supply and filling with river sand in foundation, plinth, under floor etc. including watering, ramming, consolidating etc. complete.		CUM	
8	1000.00	Hire charges for engaging earth moving machinery (POCLAIN) to attend to channeling works at river bed , pipe line burst works , cleaning the areas including uprooting thorny plants / other plants / heavy jungles / trees etc. of all heights and leveling the areas thereafter including all debris etc., all as per instructions of Engineer-in-charge. Rate includes hire and operation charges, to & fro charges of machinery, all labour and all other incidentals etc., complete.		HOUR	
9	42500.00	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each layer by ramming, watering etc. complete.		CUM	

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
10	2000.00	Bailing or pumping out water from trenches, foundations etc., at all depths wherever necessary as per standard specifications.		HP/ HOUR	
11		Providing and laying in position plain cement concrete of specified grade including consolidation, curing etc, complete, all as per standard specifications. All works up to plinth level. Rate excludes cost of centring and shuttering.			
a)	50.00	1:2:4 with 20mm nominal size hard broken granite stone jelly.		CUM	
b)	2600.00	1:4:8 with 20mm nominal size hard broken granite stone jelly.		CUM	
12		Providing and laying in position machine batched, machine mixed and machine vibrated design mix of reinforced cement concrete of specified grade for structural elements, excluding cost of centering, shuttering and reinforcement but including admixtures in recommended proportions (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability, all as per directions of Engineer-in-charge. M20 Grade reinforced cement concrete.			
a)	5500.00	All works up to plinth level.		CUM	

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
b)	550.00	All works above plinth level upto three storeyed level. (Each floor height – 4.5m)		CUM	b)
13	7500.00	Flooring with reinforced cement concrete of mix 1:2:4 using 20 mm nominal size hard broken granite stone jelly laid in panels not exceeding 6 x 30 m between expansion joints, including necessary vibration using needle / board / screed vibrators, all as required including necessary shuttering, painting the sides with bitumen, but excluding fabrication charges for reinforcement, all as per standard specifications.		CUM	13
14	900.00	Straightening, cutting, bending, placing in position of MS/CTD bars and binding with MS binding wires of 18/20 gauge etc. for reinforcement of RCC works at all levels. Rate includes cover blocks, cost of binding wire, conveyance of MS/ CTD bars from BHEL stores to site of work, labour etc. complete. MS/CTD bars will be supplied by BHEL at Stores at free of cost.		M.T	14
15		Centring and shuttering including strutting, propping, assembling etc. and removal of form work up to a maximum height of 4.50 metre of each floor and also up to floor three level.			15
a)	8500.00	Foundations, footings, bases of columns, equipment foundations, precast slabs, kerbs etc. for mass concrete.		SQM	a)

CONTRACTOR

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25

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
b)	7200.00	Walls (any thickness) including attached pilasters, plinth, stairs, chimney, shafts and string courses etc.		SQM		
c)	2500.00	Suspended floors, roofs, landings, balconies, access platform and sunshades.		SQM		
d)	2300.00	Lintels, beams, plinth beams, girders, bressumers and cantilevers.		SQM		
e)	300.00	Columns, pillars, piers, abutments, posts and struts.		SQM		
f)	20.00	extra for circular column shuttering		SQM		
g)	100.00	Pockets or holes in foundations for holding down bolts.		SQM		
16	20.00	<p>Manufacturing, supplying and fixing in position of anodized aluminium single / double leaved glazed door of overall size 1.00 x 2.10m with suitable frame work as per the following specification and instructions of Engineer-in-charge.</p> <p>The alround vertical & horizontal outer frame shall be with 4" x 1 3/4" x 1.60 mm (unit wt. 1.301 kg/m)sections and for door shutter the bottom member shall be with 3 3/4" x 1 3/4" x 1.70 mm thick (unit wt. 1.301 kg/m) shutter top and verticals shall be of size 1 3/4" x 1 3/4" x 1.52 mm (unit wt. 0.881 kg/m) thick and shutter divider shall be of 3 3/4" x 1 3/4" x 1.70 mm thick (unit wt. 1.243 kg/m) with necessary</p>		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
		<p>beadings and rubber gaskets as per standard specifications. The panels shall be with 5 mm thick plain glass. Door shall be provided with 2 Nos. of 300 mm long anodized aluminium handle, One No. of ISI marked heavy duty door closer of approved brand, One No. 200 mm long anodized aluminium tower bolt, suitable lock (4 lever), required top & bottom pivots, all as per specification of Engineer in charge. Rate includes cost of all materials, labour and other incidentals etc., complete.</p>			
17	100.00	<p>Providing, hoisting and fixing up to floor III level, precast reinforced cement concrete slabs of 25mm to 150mm thick of required sizes in mix 1:2:4 using 6mm to 20mm size hard broken granite stone jelly for cup boards, shelves, etc., including setting in cement mortar 1:3, cost of centering, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement and fabrication charges.</p>		CUM	
18	40.00	<p>Providing, hoisting and fixing in position of plain cement concrete slabs of 25 to 150mm thick of required sizes in mix 1:2:4 using 12 to 20mm size 6mm to 20mm size hard broken granite stone jelly. Rate includes centering, shuttering and finishing with neat cement, punning on exposed surfaces but excluding pointing.</p>		CUM	

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
19	1200.00	Providing precast cement concrete jalli 1:2:4 using 6mm to 12mm hard broken jelly with suitable reinforcement including centering and shuttering, roughening, cleaning, fixing and finishing in cement mortar 1:3 etc. Rate excludes reinforcement steel and fabrication charges. 50mm thick		SQM		
20	500.00	Providing and fixing RCC precast perforated lawn drain cover slabs of following thickness in mix 1:2:4 using 6mm to 20mm size hard broken granite stone jelly including moulding, shuttering, finishing, carrying and fixing in position etc., complete. Rate excludes reinforcement steel and fabrication charges. 75 mm thick		SQM		
21	2000.00	Precasting and fixing in position of 69mm thick RCC cable trench cover slab in mix 1:2:4 using 12 to 20 mm size hard broken granite stone jelly with top 15 mm thick finished with hardening compound of proportion one part of ironite or equivalent, four parts of cement and eight parts of 6 mm gauge hard granite stone chips (the proportion being by weight) including welding reinforcement rods to the frame work, all as per drawing, specifications and instructions of Engineer-in-charge but excluding cost of M.S frame work which will be paid separately. Reinforcement rods and M.S frames will be supplied by BHEL at stores at free of cost.		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
22	1000.00	Encasing rolled steel sections in beams and columns in cement concrete 1:2:4 using stone aggregates of size 12 to 20 mm including centering, shuttering etc. complete but excluding cost of reinforcement & fabrication charges.		CUM		
23	1200.00	Providing and fixing in position of 12 mm thick bitumen impregnated fibre board conforming to IS:1838 including cost of primer, sealing compound in expansion joints.		SQM		
24	10.00	Providing and filling in position of bitumen mix filler of proportion 80 Kg of hot bitumen, 1 Kg of cement and 0.25 cubicmetre of coarse sand for expansion joints.		CUM		
25	150.00	Providing and placing in position PVC water stops serrated with central bulb, 225 mm wide & 8-11 mm thick for construction / expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc., complete.		R.M		
26	1400.00	Random rubble masonry in foundation and basement in the mix given below including simultaneous flush pointing, all as per standard specifications. Cement mortar 1:5.		CUM		
27		Brick work with F.P.S bricks (second class ground moulded chamber bricks) of class designation 50 in foundation and plinth in: Cement mortar 1:5.				
a)	750.00	In foundation and plinth.		CUM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
b)	1650.00	In superstructure above plinth level up to floor three level.		CUM		
28	30.00	Brick partition work in cement mortar 1:5 with F.P.S bricks (second class ground moulded chamber bricks) of class designation 50 in super structure above plinth level up to floor three level.		CUM		
29	825.00	Rough stone dry packing for aprons and revetments including filling interstices with spalls, wedges, consolidating and preparing the surface, all as per standard specifications.		CUM		
30	2.00	Providing best Teak wood frames for doors, windows, ventilators and other frames, wrought framed and fixed in position. All as per standard specifications and drawings. Rate includes cost of wood, holdfasts, other materials, labour etc. complete.		CUM		
31		Supplying and fixing in position of 38/40mm thick best quality flush shutters solid core type of approved quality with formaldehyde bonded teak ply (both faces) and with teak wood internal lippings etc., complete all as per drawings and standard specifications but excluding cost of frame and furniture fittings. (Area of shutter only to be measured).				

CONTRACTOR

ACCEPTING OFFICER

30

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
a)	45.00	Single leaved		SQM		
b)	10.00	Double leaved		SQM		
32		Supply & fixing the following furniture fittings of approved brand & quality (ISI marked) in the appropriate position of doors, windows, ventilators, cupboards etc. with appropriate screws, nails etc., all as per standard specifications & instructions of Engineer in charge.		SQM		
a)	18.00	Hydraulic door closer – universal type (Heavy duty)		EACH		
b)	18.00	Mortice lock 75mm, 6 lever brass body with handles		EACH		
c)	34.00	D type Anodised Aluminium handle – 125 mm		EACH		
d)	34.00	150x11 mm Anodized Aluminium tower bolt		EACH		
e)	75.00	125 mm oxidized iron butt hinges (Heavy duty)		EACH		
f)	13.00	Hanging type door stopper		EACH		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
33	60.00	<p>Supply and fixing of SINTEX premium range flush door with frame, all as detailed below</p> <p>SINTEX DOOR FRAME:- Sintex factory made door frame made of superior quality polymeric material conforming to IS : 10151-1982. Door frame with rigid thermo vinyl polymer extruded section having overall dimension of 60 x 50 mm with 1.5 mm wall thickness. Corners of door frame to be mitre cut & mechanically fastened/thermally welded, shall be reinforced with special polymeric ' L ' corners in case of mechanically fastened and the hardware positions shall be reinforced with special polymeric rods of suitable size. Special EPDM gaskets can be provided along the frame.</p> <p>SINTEX DOOR SHUTTER:- Made of one piece moulded superior quality rigid thermo vinyl polymer extruded sections with an overall thickness of 40 mm conforming to IS 10151-1982. Door shutter is made out of polymeric extruded sections in the configuration of "C" and the overall dimension of the same is 25 x 40 mm with a wall thickness of 1.5 mm. Shutter frame is mitered and joined at the corners by means of high quality stainless steel screws. Corners of frames will be with high quality polymeric reinforcement to avoid corrosion. Infill of door shutter consists of seamless one piece multi chamber hollow extruded rigid thermo vinyl polymer section of required size with an average 1 mm wall thickness. Infill panel further prelaminated finish on either sides and to have all polymeric reinforcement. Door shutter should have S.S screws at appropriate places of rust free quality. Stickers to be indicated for fixing hard wares at appropriate places. Rate includes all furniture fittings like hinges, aldrop, handles, tower bolts, screws, bolts & nuts etc. complete.</p>		SQM	

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
34	65.00	Fabrication and fixing in position of M.S frames for cable trench cover slabs in required sizes using M.S angles, plates, flats etc., which will be supplied by BHEL at Stores at free of cost, all as per drawings and instructions of Engineer-in-charge. Rate includes conveyance of raw materials from BHEL stores to contractors fabrication shop, fabrication charges including cutting, welding, preparing and supplying DODL's for BHEL's approval, supply of fabricated frames at site of work, fixing in proper position etc., complete.		M.T		
35	50.00	Conveying from BHEL stores to site of work cutting to size and fixing in position of 75 x 75 x 6 mm or other size M.S angles in required lengths for forming the rebates in cable trench (for fixing the cable trench cover slabs) including welding in position of dowel bars to the angles and embedding the angle iron frame in the flooring concrete in proper line and level, all as per drawings and instructions of Engineer-in-charge. Rate includes loading, unloading, handling, welding and other incidental charges, preparing and supplying of DODL's for approval etc. complete, but excluding cost of M.S angles and dowel bars which will be supplied by BHEL at Stores at free of cost.		M.T		
36	39800.00	Fabrication and fixing in position of M.S inserts out of M.S plates, flats, rounds, angles etc., including necessary lugs made of rounds or flats, sizing and cutting to required lengths, threading, bolting and welding as required and placing the same in position in both plain and reinforced cement concrete members, including adjusting the shuttering if necessary, tying and holding to correct level and line. Rate includes cost of all materials, labour etc., complete but excluding raw steel sections which will be supplied by BHEL at Stores at free of cost.		KG		

CONTRACTOR

ACCEPTING OFFICER

33

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
37	79000.00	Providing holding down bolts of required sizes with nuts, washers etc. and fixing in proper level, line, alignment etc., all as per drawings and instructions of Engineer-in-charge. Rate includes cost of steel materials, bolts, nuts, washers, fabrication and machining charges, fixing, all labour etc. complete. Bolts in all sizes & lengths.		K.G		
38	1125.00	Conveying all types and sizes of holding down bolts, nuts, washers etc., from BHEL stores to site of work and fixing in proper level, line, alignment etc., all as per drawings and instructions of Engineer-in-charge. Rate excludes cost of bolts, nuts, washers etc., which will be supplied by BHEL free of cost.		K.G		
39	150.00	Providing and fixing aluminium two track sliding window with fixed aluminium grills using aluminium sections of size 60mm x 28mm x 1.20mm for outer frame, 38mm x 17mm x 1.20mm for shutter box and 38mm x 17mm x 1.20mm for interlock, aluminium deco grill design DG 202 or equivalent, 4mm thick plain glass for panes, PVC wheels, "U" rubber, screws, locking arrangements etc., complete, all as per instructions of Engineer-in-charge.		SQM		
40	1620.00	Finishing the top of all floors with 20 mm thick cement concrete (without using sand) in the proportion of one part of cement and three parts of 3 to 10 mm gauge hard broken granite stone chips and finishing the top surface smooth, rounding of corners, curing etc., complete, all as per standard specifications. (Ellis pattern I sort)		SQM		

CONTRACTOR

ACCEPTING OFFICER

34

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
41	270.00	Finishing the top of all floors with 25mm thick cement concrete (without using sand) in the proportion of one part of cement and three parts of 3to 10mm gauge hard broken granite stone chips and finishing the top surface smooth, rounding of corners, curing, providing borders etc., complete, all as per standard specifications. (Ellis pattern flooring)		SQM		
42	42100.00	Floor finish with 40 mm thick granolithick flooring over the concrete base while it is wet for proper bonding, the bottom 25 mm thick consisting of one part of cement and one part of 6 mm gauge hard broken granite stone chips (the proportion being by volume) and the top 15 mm finished with hardening compound of proportion one part of hardonate (ironite or equivalent) four parts of cement and eight parts of 6 mm gauge blue granite stone chips (the proportion being by weight) including finishing and painting the sides with bitumen etc., complete, all as per standard specifications.		SQM		
43	300.00	Floor finish with 40mm thick over concrete base while it is wet for proper bonding.40mm thick finish consists of one part of cement and one part of 6mm gauge hard broken granite stone chips(the proportion being by volume) and finished smooth including painting the sides with bitumen etc., complete, all as per standard specifications.		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
44	600.00	Supply and fixing 7mm thick (approximate) ceramic tiles of approved make and colour of required sizes in skirting, walls, risers of steps and dado on 12 mm thick cement mortar 1:3 plaster and joined with white cement using appropriate colour pigment etc., complete, at all levels all as per standard specifications.		SQM		
45		Providing, laying and finishing the top of floor / side walls with the following slabs of required sizes and best quality over a bedding layer of cement mortar 1:4, 20 mm thick, finished with flush pointing in white cement using appropriate colour pigment etc. complete, at all levels all as per standard specifications.		SQM		
a)	10.00	Cuddappah slabs 20 to 25 mm thick single side polished		SQM		
b)	35.00	Marble slabs 16 to 18 mm thick, Adanga variety		SQM		
c)	10.00	Granite slabs 10 to 12 mm thick – Steel Gray/P White		SQM		
d)	260.00	Granite slabs 10-12mm thick- Gem red.		SQM		
e)	55.00	EUROCON tiles (RIVERA) of size 33cm x 33cm or thereabouts and 20mm thick in all floors.		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
46	15.00	Providing and laying glazed tiles of required sizes and minimum thickness of 5mm in flooring, treads of steps and landings laid on a bed of 10mm thick cement mortar 1:3, finished with flush pointing in white cement etc., complete, all as per standard specifications. White Glazed tiles.		SQM		
47	15.00	Providing and laying glazed tiles of required sizes and minimum thickness of 5mm in skirting, walls, risers of steps, dado etc., with a backing of 12mm thick cement mortar 1:3, finished with flush pointing in white cement etc., complete, all as per standard specifications. White Galzed tiles.		SQM		
48	1100.00	Supply and fixing 7mm thick (approximate) ceramic tiles of approved make and colour of required sizes in flooring, treads of steps, landings, etc., laid on a bed of 10mm thick cement mortar 1:3 finished with flush pointing in white cement using appropriate colour pigment etc., complete all as per standard specifications.		SQM		
49	100.00	Providing weathering course on top of roof slab with 20 mm size brick jelly and pure lime (no sand) in the proportion of 32 : 12.5 to the required thickness, well beaten with wooden battens, so as to secure adequate slope, all as per standard specifications and instructions of Engineer-in-charge.		CUM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
50	1200.00	Providing weathering course on top of roof slab with one course of split tiles or pressed flat tiles of 20 mm nominal thickness and of approved size, set in cement mortar 1:3 with an admixture of crude oil at 10% by weight of cement, 12 mm thick bedding layer including pointing the tiles with the same oiled mortar etc., complete, all as per standard specifications.		SQM		
51	18400.00	Plastering with cement mortar 1:5, 12mm thick at all levels as per standard specifications.		SQM		
52	40.00	Damp proof course with cement mortar 1:3, 12 mm thick mixed with an admixture of crude oil at 5 % by weight of cement, all labour etc. complete as per standard specifications.		SQM		
53	660.00	Damp proof course with cement mortar 1:3, 20 mm thick mixed with an admixture of crude oil at 5 % by weight of cement, all labour etc. complete as per standard specifications.		SQM		
54	2800.00	Ceiling plastering with cement mortar 1:3, 6mm thick at all levels as per standard specifications.		SQM		
55	3500.00	Pointing to rough stone dry packing in aprons and revetments including grouting to a depth of 40mm with cement mortar 1:3, all as per standard specifications.		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
56	330.00	Flush pointing with cement mortar 1:3 for stone slab pavement or precast slab pavement or tiling work etc, all as per standard specifications.		SQM	
57	8500.00	White washing three coats on surfaces at all levels using Janathacem or equivalent material to give an even shade including cleaning, brushing of walls and preparing surfaces in accordance with standard specifications. Rate includes cost of all materials, labour, curing etc., complete.		SQM	
58	14000.00	Applying one coat of exterior emulsion primer (ACE or any other equivalent) of approved brand and manufacture on wall surfaces at all levels.		SQM	
59		Painting coats with exterior emulsion paint (ACE or any other equivalent and approved brand) of approved shade on surfaces at all levels to give an even shade including preparing the surfaces, removal of dirt, thorough cleaning by watering etc., all as per standard specifications. Rate includes cost of necessary plaster of paris and putty wherever required, labour and all incidentals etc. complete.			
a)	8000.00	Two coats		SQM	
b)	6000.00	One coat		SQM	

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
60	1150.00	Painting walls with water proofing cement paint of approved brand and shade on surfaces to give an even shade including cleaning, preparing the surfaces, curing etc., complete. Three coats (A priming coat of cement primer and two coats of water proofing cement paint.		SQM		
61		Distempering using oil bound washable distemper of approved brand and shade on surfaces including cleaning, brushing, preparing the surfaces at all levels even and sand papered smooth in accordance with standard specifications.				
a)	1200.00	Three coats (A priming coat with approved primer and two coats of distempering)		SQM		
b)	1250.00	Two coats		SQM		
62	160.00	Painting three coats (A priming coat with approved primer and two coats of synthetic enamel paint) with synthetic enamel paint of approved brand and shade on surfaces to give an even shade including cleaning the surfaces at all levels of all dirt, dust and other foreign matters, sand papering and stopping, all as per standard specifications.		SQM		
63	165.00	Polishing two coats with French polish including a coat of wood filler to give an even surface, including cleaning the surfaces of all dirt, dust and sand papered smooth, at all levels all as per standard specifications.		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
64	100.00	Refilling the column foundation pits with the stones generated from side during excavation for column foundation pits, in layers including carrying from site, packing the stones in position with sufficient spalls, so as to fill the voids completely including filling up the voids with excavated earth, watering, consolidating complying with standard specification.		CUM		
65	875.00	Refilling the column foundation pits with 150mm size soling stones / boulders in layers including supplying of soling and packing the stones in position with sufficient spalls, so as to fill the voids as completely as possible and including filling up the voids (20% by volume of soling stones / boulders) with excavated earth, watering, consolidating complying with standard specification. All as per the instruction of the Engineer-in-charge.		CUM		
66	400.00	Providing 50 mm consolidated thick bituminous macadam over bituminous surface using IRC grade metal of 0.35 Cu.m of 25 to 12 mm, 0.21 cu.m of 12 to 6 mm & 0.14 Cu.m of 6 mm and below for 10 Sq.m with 40 kg of bitumen for premixing, including handling charges at CMP site, labour for loading the bitumen in bitumen tank and metal to feed units, labour for attending to paver site, heating & mixing the bitumen and metal to the required temperature in the central hot mix plant, conveying the mix by tipper to paver site, spreading the mix in required temperature & thickness with mechanical paver to the specified grade and cross section, consolidation by power roller to get the required density, including hire charges for CMP, paver finisher, tipper, power roller, bitumen boiler, all other tools and plants, incidental charges such as barricading, provision of danger lights etc., complete. Rate includes cost of metal, bitumen, hire and running charges for tools & plants and all other incidentals etc., complete. Payment will be made on pre level & post level measurements.		CUM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
67	200.00	Providing semidense carpet of 40 mm consolidated thickness using machine crushed IRC size HBG metal 0.16 Cu.m of 13.20 mm, 0.256 Cu.m of 11.20 mm and 0.176 Cu.m of 5.60 mm & below for 10 Sq.m with 49.60 kg of bitumen for premixing for 10 Sq.m of 40 mm consolidated thickness of semidense carpet, including cost of bitumen, handling charges, labour for loading the bitumen in bitumen tanks & metal in feeder units, labour for attending paver units, heating & mixing the bitumen and metal to the required temperature in the central hot mix plant, conveying the mix from CMP site to work site by tipper, spreading by the paver finisher to the required grade & cross profile & consolidation by power roller, including hire and running charges for CMP, paver finisher, tipper, power roller, bitumen boiler and all other tools & plants & all other incidental charges etc., complete. Rate includes cost of metal, bitumen, labour, hire & running charges of tools & plants, barricading, providing of danger lights etc.. complete. Payment will be made based on pre level & post level measurements.		CUM		
68		Providing and applying tack coat including heating the bitumen in boiler, labour for preparing the surface, spraying the bitumen as tack coat, hire & running charges for all tools & plants & all other incidentals etc. complete.				
a)	6640.00	Over bituminous surface using 5 K.G of bitumen (grade 80/100) per 10 SQM area.		SQM		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
b)	6640.00	Over WBM surface using 10 K.G of bitumen (grade 80/100) per 10 SQM area.		SQM		
69		Supply, spreading and laying to proper line, level, camber and grade with granite stones of following sizes for first or second layer of metaling for a thickness of 75 mm including sectioning to camber, rolling dry with power roller, also supply and spreading gravel 25 mm thick for blindage, watering and consolidating the surface with power roller etc., all as per standard specifications. Rate includes cost of all materials, labour, contractor's power roller charges, etc., complete.				
a)	5440.00	IRC graded stone aggregates of size range from 63 to 45 mm		SQM		
b)	5440.00	IRC graded stone aggregates of size range from 53 to 22.4 mm		SQM		
70	7000.00	Providing and laying granular sub base as per table Nos. 400-1/400-2 and grading 1 of MORT & H – Revision IV with sand, gravel and crushed stone in the proportion of 1 : 0.75 : 0.25 and combination these of for specified thickness on prepared sub grade in accordance with the requirements of the specifications. Rate includes cost of all materials to site of work, mixing in the required proportion, spreading, compacting, rolling with contractor's power roller, all labour, other incidentals etc., complete. Payment will be made only for the finished (compacted) quantum of work.		CUM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
71		Supply RCC pipes (NP2 Class) of following sizes with collars at site of work, lowering to trench, laying to proper grade and alignment, joining the collars with stiff mixture of cement mortar 1 : 2, testing of joints etc., but excludes cost of cement which will be supplied by BHEL at stores at free of cost.				
a)	220.00	150 mm dia.		R.M.		
b)	1500.00	300 mm dia.		R.M.		
c)	560.00	450 mm dia.		R.M.		
d)	380.00	600 mm dia.		R.M.		
e)	30.00	750 mm dia.		R.M.		
f)	10.00	900 mm dia.		R.M.		
g)	10.00	1200 mm dia.		R.M.		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
72		Providing and fixing G.I pipes and specials (B – Class) of approved brand with G.I fittings and clamps on walls & floors, including cutting and making good the walls & floors etc. complete. (Internal work – exposed on walls)				
a)	100.00	A.∅ . mm dia nominal bore.		R.M		
b)	120.00	20 mm dia nominal bore.		R.M		
c)	750.00	25 mm dia nominal bore.		R.M		
d)	10.00	40 mm dia nominal bore.		R.M		
e)	180.00	50 mm dia nominal bore.		R.M		
f)	10.00	80 mm dia nominal bore.		R.M		
g)	1750.00	100 mm dia nominal bore.		R.M		
h)	230.00	150mm dia nominal bore		R.M		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
73		Providing and laying G.I pipes and specials (B – Class) of approved brand with G.I fittings in trenches. (External work) Earth work excavation for trenches and refilling will be paid separately.				
a)	10.00	A.∅ . mm dia nominal bore.		R.M		
b)	10.00	20 mm dia nominal bore.		R.M		
c)	160.00	25 mm dia nominal bore.		R.M		
d)	60.00	32 mm dia nominal bore.		R.M		
e)	10.00	40 mm dia nominal bore.		R.M		
f)	60.00	50 mm dia. Nominal bore.		R.M		
74		Providing and fixing PVC water pipes and specials conforming to ISS on walls and floors with clamps at one metre spacings, joining with proper adhesive as suggested by manufacturers, cutting and making good the wall etc. complete. (internal work – exposed on walls)				

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
a)	150.00	25mm dia.		R.M		
b)	150.00	50mm dia.		R.M		
75		Providing and laying PVC water pipes and specials conforming to ISS in trenches, joining with proper adhesive as suggested by manufacturers etc. complete. (External work) Earth work excavation for trenches and refilling will be paid separately.				
a)	40.00	PVC Pipe 40 mm OD (6 kg/Sq.cm)		R.M		
b)	60.00	PVC Pipe 75 mm OD (6 kg/Sq.cm)		R.M		
c)	80.00	PVC Pipe 110 mm OD (6 kg/Sq.cm)		R.M		
d)	230.00	PVC Pipe 160 mm OD (6 kg/Sq.cm)		R.M		
76	55.00	Providing and fixing 110 mm OD PVC pipes of 4 K.G / Sqcm conforming to ISS including joining with proper adhesive as suggested by manufacturers and suitable clamps for rain water pipes, drainage etc. Rate excludes all specials like shoe, bend, tee, tee with door etc.		R.M		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
77		Providing and fixing PVC moulded fittings / accessories on walls for rain water pipes conforming to ISS including joining with seal rings and proper adhesive as suggested by manufacturers etc. complete.				
a)	16.00	75 x75 x 75 mm single tee without door.		EACH		
b)	20.00	110 mm shoe		EACH		
c)	50.00	110 mm bend		EACH		
78		Providing and fixing in position of brass wheel valve / gate valve of approved brand with C.I wheel etc. complete. (ISI marked)				
a)	90.00	25 mm nominal bore		EACH		
b)	4.00	50 mm nominal bore		EACH		
c)	12.00	100 mm nominal bore		EACH		
79	32.00	Providing and fixing in position of 15 mm nominal bore brass bib cock (Medium Duty) of approved brand (ISI marked).		EACH		

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
80	60.00	Providing and fixing in position 15 mm nominal bore C.P brass long body bibcock of approved brand (ISI marked) and weighing not less than 690 grams.		EACH		
81	110.00	Providing and fixing in position brass stop cock (Medium Duty) of approved brand (ISI marked). 15mm nominal bore.		EACH		
82	8.00	Providing and fixing in position 100 mm dia C.P brass shower rose (tilting type) of approved brand with 15 or 20 mm dia inlet.		EACH		
83	32.00	Providing and fixing in position of white glazed earthenware wash basin of size 550 x 400 x 225 mm of approved brand with M.S or C.I brackets painted with two coats of synthetic enamel paint, single 15 mm C.P brass pillar tap and C.P brass chain with rubber plug, 32 mm C.P brass waste coupling of standard pattern, 32 mm dia PVC waste pipe etc. complete, including cutting and making good the walls wherever required.		EACH		
84	32.00	Providing and fixing in position of 600mm x 20 mm □ alvaniz aluminium towel rail.		EACH		
85	30.00	Providing and fixing 600 x 450 x 5 mm □ alvani edge mirror of superior glass (approved brand) mounted on 5/6 mm thick hard board / ply wood / plastic folder sheet, fixed to wooden cleats with C.P brass screws and washers, etc. complete.		EACH		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
86	32.00	Providing and fixing in position of 100mm x 75 mm Nahani trap with PVC grating, all as per standard specifications.		EACH		
87	16.00	Providing and fixing in position of Orissa pattern water closet of approved brand with integral type foot rests, suitable P or S trap etc. complete. 580 mm size (White)		EACH		
88	8.00	Providing and fixing in position of pedestal type water closet (European type W.C pan) 400 mm high of approved brand with seat and lid, C.P brass hinges and rubber buffers, 10 litre PVC low level flushing cistern with fittings and painted C.I / M.S brackets with 15 mm PVC connection, 32/40 mm PVC flush bend with fittings and clamps, over flow arrangement with specials and mosquito proof coupling, cutting and making good the walls and floors wherever required etc., complete. White Glazed.		EACH		
89	36.00	Supplying at site of work and fixing in position of white glazed earthenware Elegant 'JUMBO TYPE' long size urinal of Parry ware or equivalent make including supply and fixing of CP spreader, PC lead connection, waste coupling, CP flange, fixing brackets and PVC bush etc., complete. The rate is inclusive of conveyance of all the above materials to site of work labour for carrying to spot and fixing with necessary screws etc., complete. All as per standard specifications and instructions of Engineer-in-charge.		EACH		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
90	16.00	Providing and fixing in position of 10 litre low level PVC flushing cistern of approved make with fittings and flush pipe etc. complete.		EACH		
91		Providing rectangular/circular manhole as per Drawing No.D/1016065 for the following depths. Rate includes earth work excavation in all soils (except hard rock requiring blasting) including soft disintegrated rock, watering and ramming of foundation bed, providing cement concrete 1:4:8 in foundation, including necessary slope and forming channels smoothly finished in C.M 1:2, brick work in C.M 1:5 for arch ring, etc., using standard approved bricks, plastering in cement mortar 1:4 for side walls (outside and inside), cement concrete 1:2:4 using 12 to 20 mm HBGS jelly for manhole cover fixing, providing and fixing C.I steps for ladder rungs, etc., complete. Rate includes an initial lead of 10 m and all lifts for excavation and other charges etc., complete, but excludes cost of manhole cover and frame.				
a)	6.00	Up to 0.90 m depth		EACH		
b)	6.00	Above 0.90 and up to 1.20 m depth		EACH		
c)	3.00	Above 1.20 and up to 1.50 m depth		EACH		

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
d)	1.00	Above 1.50 and upto 1.80 m depth		EACH		
e)	1.00	Above 1.80 and upto 2.10 m depth		EACH		
f)	1.00	Above 2.10 and upto 2.40 m depth		EACH		
g)	1.00	Above 2.40 and upto 2.70 m depth		EACH		
h)	1.00	Above 2.70 and upto 3.00 m depth		EACH		
i)	1.00	Above 3.00 and upto 3.30 m depth		EACH		
J)	1.00	Above 3.30 and upto 3.60 m depth		EACH		
92	22.00	Providing and fixing C.I cover with frame for manholes. 560 mm dia cover and frame. (Heavy duty) Total weight of cover and frame to be not less than 208 K.G. (Weight of cover 108 K.G and weight of frame 100 K.G)		EACH		
93	120.00	Labour charges for fixing C.I pipes (S&S or flanged pipes) along the steel columns with suitable clamps for rain water pipes to proper alignment. Rate excludes cost of pipes.		MT		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
94	15.00	Labour charges for fixing C.I specials such as tees, bends, collars, tapers, caps etc. along the steel columns with suitable clamps for rain water pipes to proper alignment. Rate excludes cost of specials.		MT		
95		Labour charges for cutting C.I pipes true to axis and filing smoothly and finishing the ends complete.				
a)	25.00	150mm dia		Each Cut		
b)	30.00	200mm dia		Each Cut		
c)	25.00	300mm dia		Each Cut		
96		Providing flanged joints to double flanged C.I pipes and specials including testing of joints, 3 mm thick rubber insertions, suitable bolts and nuts etc. complete.				
a)	50.00	100/ 125mm		Each		
b)	60.00	150/ 200 mm dia		Each		
c)	25.00	250/ 300 mm dia		Each		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
97		Providing lead caulked joints to C.I pipes and specials including testing of joints but excluding cost of pig lead.				
a)	50.00	80/100mm dia		Each Joint		
b)	120.00	125 / 150 mm dia.		Each Joint		
c)	300.00	200 / 250 mm dia		Each Joint		
d)	100.00	300 / 350 mm dia.		Each Joint		
98	150.00	Conveyance of CI pipes & specials ,pig lead etc., from stores / stock yard to site of work by contractor's own arrangements including loading, leading, unloading, stacking at site, all as per the instructions of Engineer-in-charge. Payment will be made as per the standard weight of the materials.		MT		
99	5.00	Grouting the H.D bolts, underneath the base plates etc., after alignment with wet cement grout (1:1), all as per standard specifications. Rate includes cleaning the sleeves/pockets, tools and plants etc., complete except cement which will be supplied by BHEL at stores at free of cost.		CUM		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
100	15.00	Grouting the H.D bolts, underneath the base plates etc., after alignment with non-shrink high strength cementitious grout of such as Cera Grout 20/40 or Pidigrout 5M/10M or Flogrout 40/60 or Conbextra GP1/GP2 or any other equivalent grout, all as per instructions of Engineer in charge and as per standard specifications. Rate includes cost of non-shrink grout, cleaning the sleeves/pockets, tools, labour etc., complete.		CUM		
101		Conveyance of earth, sand, gravel, rough stone, broken stone, brick bats (debris) etc. by contractor's own lorry including loading, leading, unloading, stacking or spreading, all as per instructions of Engineer-in-charge. Payment for conveyance of earth will be made based on pit measurement and for other items based on stack measurements.				
a)	114400.00	0 to 1km		CUM		
b)	1400.00	Beyond 1 km but upto 2 km		CUM		
c)	1800.00	Beyond 2 km but upto 3 km		CUM		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
102	500.00	Conveyance of debris generated by dismantling and other modification works by various departments, factory wastes discarded cotton abandoned broken, glass, water closets, urinals, flush tanks, broken refractory bricks, A C materials, hedge cuttings, all other debris, and waste materials from various places, of factory premises where they are stacked / accumulated and transporting the same by contractors lorry and disposing off at the specified places, all as per instructions of Engineer-in-charge. Rate includes labour for collection of the site debris from various places, loading, un loading, spreading, ½ alvaniz, etc., complete. Rate also includes for safe burning of dried leaves cut pieces of tree branches, wood, wood, waste papers etc., all by following safety precautions. Payment will be made on trip basis with a lorry load of minimum 300 cft/ trip. 0 – 1.00 km.		TRIP		
103	41000.00	Supply and fixing at site of work of polyethylene sheet water barrier of any thickness, spreading and laying carefully over the sub base prepared for concrete flooring as per standard specifications and instructions of Engineer-in-charge. Rate shall include cost of labour charges, conveying the material to site of work and other incidental charges etc., all as per standard specifications.		Sqm		

CONTRACTOR

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
104		Drilling of holes for the following dia. In Industrial Reinforced cement concrete floor or in machine foundation using power drilling machines in proper manner to a maximum depth of 200mm as per std. Specification and fixing the anchor bolts through the holes provided in the machine with the drilled holes in the shop floor as per the instructions of Engineer-in-charge. The required number of anchor bolts will be supplied by BHEL at free of cost. The power and compressed air required for drilling holes will be supplied by BHEL at free of cost. The quoted rate shall include all labour charges for drilling holes, hire and running charges for machineries, tools and plants, loading, leading, conveyance and other incidental charges for fixing anchor bolts, cleaning the debris, etc. complete.				
a)	2000.00	10-14mm dia		Each		
b)	1500.00	15- 18mm		Each		
c)	1500.00	19- 23mm		Each		
d)	500.00	24- 28mm		Each		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
105		Drilling of holes for the following sizes in industrial concrete floor / machine foundations using power-drilling machine, grouting and anchoring of bolts as per standard specification and instructions of Engineer-in-charge. The scope of work includes supply of chemical grout like BOSLIK or any other approved brand , grouting in to the holes before fixing the bolts using mechanical gun and anchoring the bolts at proper position, level and alignment to the satisfaction of Engineer-in-charge. The rate quoted shall include cost of chemical grout and adhesives if any, labour charges for drilling by machine, cleaning the holes, chemical grouting with machine gun, fixing the bolts, finishing the surfaces, Hire charges for drilling machines, grouting machine gun, and other tools & plants required, loading , leading and other incidental charges etc., complete but excluding cost of anchor bolts, Power and compressed air which will be provided by BHEL at free of cost.				
a)	150.00	12mm dia		Each		
b)	150.00	16mm dia		Each		
c)	150.00	20mm dia		Each		

CONTRACTOR

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Sl. No.	Description of work	Rate (both in figures and in words)	Unit	Amount	
				Rs.	P.
d)	150.00 24mm dia		Each		
e)	150.00 30mm dia		Each		
106	40.00 Supplying and fixing in position of aluminium louver ventilator of over all size 1.10 x 0.60m or thereabout using standard anodized aluminium sections of size 2½" x 1½" for frame conforming to IS 1948 of latest edition. The louvered glass panels shall be 5mm frosted glass panes. The ventilator should have 12 No. of louvers (6 x 2) fitted properly in aluminium frame work having arrangement to close/open. The rate quoted shall include cost of all materials, labour, fixing charges, locking arrangements etc., all as per standard specifications, drawing and code of practice and instructions of Engineer-in-charge.		SQM		
107	5.00 Providing, laying and finishing the top of counter wash basin with best quality granite slab of 18 to 20 mm thick over a bedding layer of CM 1:3, 25mm thick finished with flush pointing in white cement using appropriate colour pigment etc. Rate shall include cutting charges for the required shape, cutting oval shape holes for fixing wash basins, providing holes for fixing tap, nosing and edge polishing etc., complete and all as per standard specifications and instructions of Engineer-in-charge. <u>Steel Grey / P.White.</u>		Sq.m.		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
108	5.00	Supplying at site of work, carrying and fixing in position of White Glazed Earthen Ware Wash hand basin of oval shape of approved make and quality (Parry ware) with necessary fixing arrangements. Rate includes cost of wash basin, labour for carrying and fixing and all other incidental charges etc. complete. All as per the instructions of Engineer-in-charge.		Each	
TOTAL FOR PART-A					

CONTRACTOR

ACCEPTING OFFICER

PART-B (STRUCTURAL STEEL WORKS)

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
109	6250.00	Collection from BHEL stores and transporting the raw structural steel sections to the contractor's site fabrication shop, fabrication of steel work including all materials going into the process of fabrication and forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary, all as per drawings and standard specifications. Rate includes delivery of fabricated steel work at erection site ready for erection, including preparation and supply of drawing office ¶ alvaniz list for BHEL's approval in compact disk with two copies of printout, all charges for packing (wherever called for) handling, conveying, stacking and all other incidental charges both for raw materials and fabricated steel works. Rate excludes raw structural steel sections which will be supplied by BHEL at stores at free of cost. Rate shall include cost of providing one coat of red oxide primer to relevant IS specification over structural steel works including preparing the surfaces by thoroughly cleaning oil, grease, dirt and other foreign matters and scoured with wire brushes, fine steel wool scrapers and sand paper, all as per standard specifications.		M.T.	

CONTRACTOR

ACCEPTING OFFICER

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Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
110	1525.00	Conveying raw structural steel sections from BHEL stores, transporting to contractor's fabrication shop/site, fabricating the components using submerged arc welding with single (or) multiple electrodes, and with approved quality of flux following the procedure stipulated in AWS D.1.1. (latest). The components shall be pre assembled with required facilities for turning, inverting, tilting to facilitate fabrication and inspection. Edge preparation for welds shall be as per AWS D.1.1. (Latest) (or) as furnished in QCP. All welds shall be subjected to U.T./ N.D.T. test as per Q.C.P. of BHEL. Sequence of welding shall be worked out by the contractor and submitted to BHEL for approval. The components to be fabricated shall be preheated / post heated to remove residual stresses due to welding and to remove distortion using temporary fixtures as per Q.C.P. of BHEL. Erection mark and stacking the fabricated components shall be executed in accordance with standards. Payment will be made only for the members / parts which were welded together using auto welding, under this item. Any other attachment like bracings, battens, stiffeners, gussets, cleats, ribs etc., which will be welded during assembly will be paid under general fabrication item of this Bill of Quantities. The rate shall include cost of providing one coat of red oxide primer to relevant IS specification and delivery of fabricated steel work at erection site ready for erection including preparation & supply of DODL for BHEL's approval in compact disk with two copies of printout. Quoted rate shall include cost for handling, leading, conveying, stacking, consumables hire charges for tools, plants, fuels, labours and other incidental etc. complete. The raw structural steel sections will be supplied by BHEL at stores free of cost.		M.T.		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
111	125.00	Collection from BHEL stores and transporting the ERW / seamless steel tubes to the contractor's site fabrication shop, fabrication of columns, trusses, purlins, runners, hand rails, etc., (all tubular) and forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary, all as per drawings and standard specifications. Rate includes delivery of fabricated steel work at erection site ready for erection, including preparation and supply of drawing office \square alvaniz list for BHEL's approval in compact disk with two copies of printout, all charges for packing (wherever called for) handling, conveying, stacking and all other incidental charges both for raw materials and fabricated steel works. Rate excludes raw ERW / seamless steel tubes which will be supplied by BHEL at stores at free of cost. Rate shall include cost of providing one coat of red oxide primer to relevant IS specification over structural steel works., including preparing the surfaces by thoroughly cleaning oil, grease, dirt and other foreign matters and scoured with wire brushes, fine steel wool scrapers and sand paper, all as per standard specifications.		M.T.		
112	7900.00	Carrying from stacks to erection site and erection of fabricated steel work including all handling, conveying, assembling, hoisting, erecting in position, site welding and or bolting, alignment of structures, all as per drawings and standard specifications. Rate includes cost of bolts & nuts of approved brand and quality, hire charges for cranes, lifting tackles, welding tools and plants, labour etc., but excluding cost of fabricated components. If required, power will be given free of cost by BHEL. Weight of fasteners will not be accounted for payment.		M.T.		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
113	325.00	Collection from BHEL stores and transporting of rails CR 80 / R 45 , etc., to the contractor's site fabrication shop, straightening the rails using Gim Screw or any other equipments, preparation of edge for welding the rail joints as per drawing and erecting in position at all elevations (i.e. in floor or over the girders) using cup type rail clamps with fittings. The scope includes rail alignment after erection, fixing in position, welding the joints by using approved electrode, pre heating & post heating the joints, grinding the joints neatly, etc as per drawings, and instruction of Engineer in charge. Rate shall include cost of providing one coat of red oxide primer as per I S specification and supply of DODL's for BHEL approval in compact disc with two copies of print outs. Quoted rate shall also include cost of consumables, hire charges for tools & plants, labour and incidentals etc., complete but exclude cost of rails which will be supplied by BHEL at free of cost. The supply and fixing of Cup type rail clamps with fittings will be paid under separate item.		M.T.		
114	4700.00	Painting two coats (excluding priming coat) on structural steel works in roof structures, columns etc., at all levels with synthetic enamel paint of approved brand and shade, brushing to give an even shade including cleaning the surfaces of all dirt, dust and other foreign matters, scaffolding charges etc., complete. All as per standard specifications.		M.T.		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
115	3540.00	Painting two coats (excluding priming coat) on structural steel works in roof structures, columns etc., at all levels with aluminium paint of approved brand, brushing to give an even shade including cleaning the surfaces of all dirt, dust and other foreign matters, scaffolding charges etc., complete. All as per standard specifications.		M.T.		
116	100.00	Conveying from BHEL stores to site of work, sizing as required, hoisting and fixing in position of 6 mm thick A.C corrugated sheets with accessories such as ridge pieces, barge boards, curves etc., for roofing, side cladding etc. and fixing them in proper position with necessary G.I hook bolts, crank bolts with nuts, G.I and bitumen washers etc., complete, all as per drawings, specifications and instructions of Engineer-in-charge. Rate includes cost of G.I bolts, nuts, washers, and labour charges but excluding cost of A.C sheets and its accessories such as ridge pieces, barge boards, curves etc., which will be supplied by BHEL at Stores at free of cost.		SQM		
117	62000.00	Conveying from BHEL stores to site of work, hoisting and fixing in position of 0.47 to 0.50mm thick Bare Galvalume rib profile sheets with accessories such as ridge pieces, barge boards, curves etc., for roofing, side cladding etc., and fixing them in proper position with necessary Xylon coated self tapping / self drilling screws with EPDM washers at every ribs, etc., complete, all as per drawings, specifications and instructions of Engineer-in-charge. Rate includes cost of self tapping / self drilling screws with EPDM washer etc., and labour charges all scaffolding charges, tools and plants and all other incidental charges etc., complete but excluding cost of Galvalume sheet and its accessories such as ridge pieces, barge boards, curves etc. which will be supplied by BHEL at stores of free of cost. The payment will be made for the actual laid area only .		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
118	8000.00	Conveying from BHEL stores to site of work, hoisting and fixing in position of 4mm / 6mm thick multiwalled clear (UV coated) Polycarbonate sheet for north light glazing to suit the rows of glazing runner (inclined and vertical) as per drawing including provision of suitable aluminium frames as required. The scope of work includes supply of aluminium frames (top & bottom) in required profile fitted with EPDM rubber gaskets and fixing in the glazing runner using SDST screws of approved make and the polycarbonate sheets are suitably placed between the aluminum frames before driving the top frame screws, all as per Drawing No. BHE:CP:04:404/2009 , instructions of Engineer-in-charge. The top and bottom portion of polycarbonate sheets shall be closed with aluminium "U" channels to prevent dust and insects. Rate shall include cost of aluminum frames, U channels, EPDM rubber gaskets, SDST screws, required labour, tools & plants, etc., except polycarbonate sheets which will be supplied by BHEL at free of cost.		SQM		
119	1100.00	Carrying from stores to site of work, hoisting and fixing of 2mm thick embossed clear poly carbonate roof light sheets in specified locations with necessary Xylon coated self tapping / self drilling screws with EPDM washers etc., complete, to match the profile of Galvalume roof sheets as per instructions of Engineer-in-charge. The rate includes cost of self tapping / self drilling screws with EPDM washer etc., and labour charges all scaffolding charges, tools and plants and all other incidental charges etc., complete but excluding cost of poly carbonate sheets which will be supplied by BHEL at free of cost.		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount Rs. P.
120	2600.00	Providing fibre glass reinforcement with UV resistant polyurethane compound lining, to a minimum thickness of 3 mm on newly fabricated M.S gutters at floor level and jointing and filling the gap finishing etc., after erection at a height ranging from 12-24m from FFL, and making the gutters leak proof as per instructions of Engineer-in-charge. The work consists of thoroughly cleaning the surface of the gutters and applying an undercoat of resin over which the alternate layers(min. three layers) of fiber strand & resin to the required thickness before applying polyurethane compound coating at top with one coat of Gel coat with surface mat and polish to provide even surface . , preparation of surface with fibre reinforced plastic with 50 microns thick polyurethane lining, testing, etc., complete all as per instructions of Engineer- in –charge. Rate quoted shall also include cost of labour, material with all taxes, scaffolding charges, if any and all other incidental charges etc., complete.		SQM	
121	500.00	Supply and fixing in position of 1 alvanized iron plain sheets of 1.20 to 1.25 mm thick for flashing , hood arrangement for truss girder , capping for Roof girder . etc., using G.I bolts, nuts, screws, limpet washers etc. complete bent to shape and fixed in walls / structural members with necessary fixtures like bolts, nuts, screws, washers, etc., all as per drawings, specifications and instructions of Engineer-in-charge.		SQM	

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
122	5.00	Modification / additions / alterations of old structural steel components dismantled from their original position and making suitable to receive the newly fabricated components. The scope of work also include modification of old component by additions and alterations, forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary as per drawing and standard specifications. Rate to include one coat of red oxide primer of standard specification and delivery of fabricated steel work ready for erection, at site; preparation of Drawing Office Despatch List for approval by BHEL in compact disc with two copies of print out, and all charges for packing, wherever necessary, handling, leading, conveying, stacking, other incidental charges etc., for old component, raw steel and fabricated steel works. Rate to be all inclusive, except cost of raw structural steel sections which will be supplied by BHEL at stores free of cost. (Payment shall be made only to the portions of new items going into the process of fabrication).		MT		
123	13500.00	Carrying out LPI test wherever required as per QCP, in fabrication and erection work as per standard specification and as per the instruction of Engineer-in-charge. The rate to include supply of chemicals, labour, hire charges for tools & plants, scaffolding, other accessories and all incidentals etc., complete.		R.M.		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
124	18000.00	Carrying out MPI test wherever required as per QCP, in fabrication and erection work as per standard specification and as per the instruction of Engineer-in-charge. The rate to include supply of chemicals, labour, hire charges for tools & plants, scaffolding, other accessories and all incidentals etc., complete.		R.M.		
125	3000.00	Carrying out radiographic test using Iridium source for butt welds upto a thickness of 40mm wherever required / as per QCP as per standard specification and direction of Engineer-in-charge. The rate to include supply of required labour, films, tools, plants etc., complete.		SQ.CM.		
126	250.00	Conducting ultrasonic test on welds as per standard practice and instruction of Engineer-in-charge. The rate to include cost of labour, hire charges for tools & plants, accessories, incidentals etc., complete.		R.M.		
127	750.00	Conducting Ultrasonic testing at BHEL inside fabrication yard for steel plates using straight beam probe 24mm OD of 10mm 100% coverage from one major surface of plate in scanning direction -1 as per standard specification SA 435 / SA 435-M. The rate shall include all labour charges for marking, testing, punching of defective spots, preparation and submission of UT reports, punching of identification numbers and cost of consumables like couplants, cotton waste, etc.,. Qualified NDE personal certified level II as per ASNT standard of latest edition shall conduct testing. Also includes all incidental charges, hire and running charges for equipments tools & plants, transportation, leading, loading, conveyance, etc., complete.		SQM		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount	
					Rs.	P.
128	19000.00	Supplying and fixing Galvanised Cup type rail clamp with fittings like stud, bolt of 5.8 grade and spring washer for crane rail / BG track / gantry track etc. Rate includes conveyance, welding including consumables, labour charges etc. complete as per instructions of Engineer-in-charge.		EACH		
129	6500.00	Providing and fixing PVC rain water pipes of 160 mm OD of 4 K.G / Sq cm conforming to ISS including joining with proper adhesive as suggested by manufacturer and fixing with in column and truss girder, etc., as per standard specifications and instructions of Engineer-in-charge. Rate excludes all specials like shoe, bend, tees, and clamps will be paid under separate items. Payment will be made for the actual laid length excluding specials.		R.M		
130		Providing and fixing PVC moulded fittings in Rain water pipes confirming to ISS including joining with proper adhesive as suggested by manufacturer etc., complete.				
a)	830.00	160mm – 90 degree bend		EACH		
b)	460.00	160mm – 45 degree bend		EACH		
c)	260.00	160mm –Tee without door		EACH		

CONTRACTOR

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate (both in figures and in words)	Unit	Amount		
					Rs.	P.	
131	3500.00	Supply and fixing of expansion stud pin anchor bolts of size M16 dia. X 200mm long in the concrete floor / foundation. The scope of work includes drilling required size of holes, cleaning holes with air, driving the anchor bolts and fixing them properly in position and level as per manufacturer's specification and instructions of Engineer-in-charge. Rate includes cost of expansion stud pin, anchor bolts, nuts, washers, labour charges for drilling, cleaning, driving, fixing and finishing, hire charges of tools and plants etc., complete.		EACH			
132	200.00	Supply and fixing Air ventilator (rotating / turbine type) of approved brand and fixing in roof as per manufacturer's specifications and instructions of Engineer-in-charge. The Air ventilator have base and rotating parts, made of corrosion resistant high temperature alloy material. The ventilator wheel rotating on a single SS ball pivot pipe assembly, frictionless, easy to rotate and no bearing is used. Rate includes cost of ventilator, fixing charges, screws / bolts, tools & plants, labour charges etc., complete.		EACH			
TOTAL FOR PART-B					_____
TOTAL FOR PART-A					
GRAND TOTAL					_____

(RUPEES ONLY)

CONTRACTOR

ACCEPTING OFFICER

SCHEDULE 'B'

1. The following materials will be issued FREE of cost to contractor at BHEL Stores / Stock yard.

SI.No.	DESCRIPTION	PLACE OF ISSUE
1	Cement	BHEL STORES or Stock yard
2	M.S Rounds, C.T.D Bars & Structural Steel, rails and all railway materials	BHEL STORES or Stock yard
3	A.C. / Galvalume / Polycarbonate Sheets	BHEL STORES or Stock yard
4	Cast iron pipes & specials including pig lead for jointing	BHEL STORES or Stock yard

2. It will be the responsibility of the Contractor to submit his demands for the above stores in writing atleast seven days in advance of the actual requirement.
3. Issue of Stores is subject of the availability at the place of issue cited above, items of stores to be issued by BHEL which are not available at the time of indenting by the contractor may be supplied by BHEL after necessary procurement. The contractor shall not be entitled to any claim of compensation for delay in the supply of stores by BHEL under any circumstances.
4. The materials will be issued only during the working hours of the BHEL Stores Department (8.00 a.m. to 4.30 p.m.). Contractor shall have to transport them as soon as they are issued to him to the site of work at his own cost.
5. The steel materials if issued will be in random lengths and sizes as stocked by the BHEL and the cost of all cutting, conversion, substitution and fabrication as well as wastage shall have to be borne by the Contractor.
6. The contractor shall from time to time render proper account of all materials issued to him by BHEL. If he fails to do so, no further issue of materials will be made to him and he will be held responsible for any delay in the execution of the work which may occur on this account.
7. Where A.C. Sheets and accessories, Doors, Windows, Sanitary fittings, Special glasses or other items are issued free of cost to the contractor, the contractor will have to make good at his own cost any loss or damage to any part or whole of the items issued to him as above. All wastage within the premises limits as fixed by BHEL will be charged for at the prescribed issued rates of BHEL. Excess wastage will be charged for at punitive rates which will be 100% higher than the issue rates.
8. All surplus materials in good condition which are not returned to the BHEL Stores as also quantities of materials consumed in excess of the max. permissible limit as fixed by BHEL shall be charged for at punitive rates.

The decision of the Senior Engineer / Dy. Manager / Manager as to the extent to which materials have been rendered surplus or consumed in excess of the actual requirements shall be final and conclusive and binding on the contractor.

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.

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
1	BHE:CP:02:380:09	Part Layout showing the New Plant Area
2	BHE:CP:00:364:09	Details of foundation & other civil works for extension works In Block-II
3	BHE:CP:00:365:09	General & structural arrangement for Block-II
4	BHE:CP:01:341:09	Common Store Shed
5	BHE:CP:00:366:09	Details of foundation & other civil works for System Bender Block
6	BHE:CP:00:367:09	General & structural arrangement for System Bender Block
7	BHE:CP:01:375:09	General arrangement of proposed Canteen in New Plant
8	BHE:CP:03:381:09	Typical Toilet details
9	BHE:CP:03:382:09	RCC Roof details for typical toilet at New Plant
10	BHE:CP:01:374:09	Details of Real Time Radiography Building
11	BHE:CP:04:404/09	Polycarbonate sheet fixing details

SCHEDULE 'E'
LEAD STATEMENT

Sl.No.	Name of Material	Name of Source	Lead Particulars both for Factory and Township
1	Cement	BHEL Stores	2 Kilometre
2	M.S Rounds, C.T.D Bars & Structural Steel, rails and all railway materials	BHEL Stores	2 Kilometre
3	A.C. / Galvalume / Polycarbonate Sheets	BHEL Stores	2 Kilometre
4	Cast iron pipes & specials including pig lead for jointing	BHEL Stores	2 Kilometre
5	Broken Stones, R.R. Stones etc.	Thuvakudimalai	4 Kilometre
6	Sand	Coleroon River	14 Kilometre

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

AUTHORITY TO TENDER

Tender Notice No. **05 / 09-10**

Office of the
ADDL GENERAL MANAGER / CIVIL /
PLANNING & PROJECTS
BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHY – 14.

Tender Schedule No. **14 / 09-10**

Item rate tender for work required in “**Construction and expansion of additional shop floors, machine foundation, RCC framed structure and other infrastructure works in Block-II and System Bender Shop area in New Plant.**”

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.GENERAL MANAGER / CIVIL / PLANNING / (FACTORY) Bharat Heavy Electricals Limited Unit, Thiruverumbur, Tiruchirappalli – 620 014, **upto 14.30 hrs. on 25.01.2010** addressed to the Addl. General Manager / Civil / Planning & Projects, BHEL. Tiruverumbur, Tiruchirappalli – 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 Addl. General Manager/Civil/Factory & Projects
Bharat Heavy Electricals Limited
Unit : Tiruverumbur
TIRUCHIRAPPALLI – 620 014.

I / We hereby offer to carryout the work of **“Construction and expansion of additional shop floors, machine foundation, RCC framed structure and other infrastructure works in Block-II and System Bender Shop area in New Plant.”**

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

- 1.Specifications (General & Particular)
- 2.Drawings
- 3.Schedule ‘A’, ‘B’, ‘C’, ‘D’ & ‘E’
- 4.Schedule of Rates
- 5.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 upto 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 sold 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: Thriuverumbur, Tiruchirappalli – 620 014. for a sum of Rs.....

.....
.....

.....at the percentage rates as indicated in Schedule 'A'.

SignatureDate.....

Designation