



BAP: CF&D:16 / 3774

November 2, 2009

To

Dear Sir(s),

Sub: Civil works for well water supply scheme to public buildings toilets in Township and Shop floor toilets in factory - Reg.

Ref: Tender Notice No .BAP: CF: 25 / 2009 – 2010 Dt 02.11.2009

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We herewith enclose the document for the above work. You are required to submit most competitive offer in a sealed cover so as to reach the office of Sr DGM (Civil Projects & Services) before 15.00 Hrs. **The tender shall be opened at 15.00 Hrs. on the same day.**

|              |                                                                                                                           |                 |                   |                    |                 |
|--------------|---------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|--------------------|-----------------|
| Name of work | <b>Civil works for well water supply scheme to public buildings toilets in Township and Shop floor toilets in factory</b> |                 |                   |                    |                 |
| EMD amount   | <b>Rs 40,000.00</b>                                                                                                       | Date of Opening | <b>09.11.2009</b> | Period of Contract | <b>3 Months</b> |

**THE SUCCESSFUL TENDERER IS REQUIRED TO START THE WORK IMMEDIATELY AND COMPLETE THE WORK WITHIN THE STIPULATED TIME. UNDER ANY CIRCUMSTANCES NO EXTENSION OF TIME WILL BE GRANTED. ANY DELAY BEYOND THE DUE DATE OF COMPLETION WILL BE SUBJECTED TO LIQUIDATED DAMAGES.**

**- The successful tenderer has to remit Security Deposit as mentioned in the Page -2.**

- We hope to receive your offer on the due date of opening and in case you are not interested to quote, then you please state the reasons and return back the documents.

- Increasing the rates subsequent to opening of tender is not admissible and the tender is liable for cancellation / forfeiture of EMD if any. The rates quoted in the tender shall remain valid for a period of Three Months from the date of opening the tender.

- No deviations to the tender conditions will normally be accepted.

Thanking you,

Yours faithfully,

For and on behalf of BHEL,

**Encl.: Tender Document**

(V.DHINAKHAR)

Dy Manager (Civil Project & Services)

(Contd.....2)

**Earnest Money Deposit : (Clause 8.1)**

(i) The Earnest Money Deposit for the above work is given in the above column and will be accepted as CASH (at



Phone: 04172- 212026/254694 Fax : 04172 -241102

Email : [ccdurai@bhelrpt.co.in](mailto:ccdurai@bhelrpt.co.in)

BHEL Cash Office, Ranipet – 6) (as permissible under Income tax Act) or PAY ORDER or DEMAND DRAFT drawn in favour of, BHEL / RANIPET – 6 payable at SBI / BHEL Project, Mukundarapuram (Bank Code No : 7013).

(ii) The EMD will be refunded to unsuccessful tenderers within 15 days of acceptance of award of work by the successful tenderer. **The same will be refunded thro Electronic Fund Transfer only.** Other modes of refund like Demand draft, Cheque, Pay order etc., will not be made.

(iii) For successful Tender, the EMD shall be converted / adjusted against the Security Deposit.

(iv) The EMD shall not carry any interest (v) Without EMD, your tender will not be considered

**Security Deposit : (Clause 8.2)**

(i) The rate of security deposit will be as below (w.r.t. Total contract value):

- Up to Rs 10 lakhs : **10%**
- Above Rs 10 Lakhs Up to Rs 50 lakhs : **Rs 1 Lakh + 7.50% of the amount exceeding Rs 10 Lakhs**
- Above Rs 50 Lakhs : **Rs 4 lakhs + 5.00% of the amount exceeding Rs 50 Lakhs**

(ii) 50% of SD should be deposited before start of the work. Balance SD will be recovered at the rate of 10% from running bills. Anyhow the contract value not exceeding Rs 10 Lakhs can be started before SD is collected, provided the payment can be released only after collection / recovery of initial 50% SD.

(iii) The SD shall not carry any interest.

(iv) SD may be furnished in any one of the following forms :

- Cash (as permissible under Income tax Act)
- Pay order or Demand draft drawn in favour of, BHEL / RANIPET – 6 payable at SBI / BHEL Project, Mukundarapuram (Bank Code No : 7013).
- Local cheques of scheduled banks, subject to realization.
- 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)
- Bank guarantee from scheduled banks / Public financial institutions as defined in the Companies act. The Bank guarantee format should have the approval of BHEL.
- 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.

(v) Refund of SD : 50% of SD may be refunded to the contractor in respect of all contract on satisfactory completion of work and after payment of final bill and the balance 50% on expiry of the maintenance period, provided that the contractor shall have rendered a "No Demand" certificate. In case of work where maintenance period is not involved 100% of the SD may be refunded after payment or final bill provided that the contractor shall have rendered a "No Demand" certificate.

(Contd.....3)

**Electronic Fund Transfer (EFT Form) : (as per CVC guide lines)**

- The enclosed EFT form should be duly filled and submitted along with tender documents. Without EFT form your tender will not be considered and will be rejected.
- **Suppose if you already submitted the EFT form to BHEL(Ranipet) this may be ignored.**



**Bharat Heavy Electricals Limited**  
**Boiler Auxiliaries Plant**  
**Ranipet - 632 406**  
Tamil Nadu, India

**CIVIL FACTORY AND DESIGNS**

Phone: 04172- 212026/254694 Fax : 04172 -241102

Email : [ccdurai@bhelrpt.co.in](mailto:ccdurai@bhelrpt.co.in)

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**Advance payment :**

- No advance payment shall be paid to the contractor.
- **For payment, M Book system shall be adopted as per the norms of the company**

**General :**

- The envelop / cover containing duly filled in tender documents along with necessary enclosures should neatly be indicated the following :
  - a. Name of work : To be mentioned in the left hand side top corner of the envelop in first line.
  - b. Tender Notice No : To be mentioned in the left hand top corner of the envelop in second line.
  - c. To be addressed to : **Sri V.Rajendran, -** To be mentioned in the right side  
**Manager,** middle or bottom of the envelop  
**Civil Projects & Services,**  
**BHEL / BAP / Ranipet – 632 406.**  
**Vellore Dist., / Tamil Nadu.**
  - d. From / self address : To be mentioned in the left hand side bottom corner of the envelop.

**Encl :** (i) Bill of Quantities

(ii) Special conditions of contract.

Page 1 of 10**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

**ESTIMATE****PART - I**

ESTIMATE REF NO : CF/CP/09/14

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO PUBLIC BUILDING TOILETS IN TOWNSHIP.

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                         | QTY     | UNIT | RATE<br>RS<br>P | AMOUNT<br>RS<br>P |
|------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|-----------------|-------------------|
| 2.8.1            | 01   | Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soils.    | 70.000  | CUM  | 103.40          | 7238.00           |
| 2.8.1            | 02   | Extra for every additional lift of 1.5 m or part thereof in all kinds of soils                                                                                                                                                                                                                                                                                                      | 15.000  | CUM  | 18.90           | 283.50            |
| 2.26.2           | 03   |                                                                                                                                                                                                                                                                                                                                                                                     | 60.000  | CUM  | 33.85           | 2031.00           |
| 2.9.2            | 04   | Excavation work by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m. 2.9.2 Hard rock (requiring blasting) | 140.000 | CUM  | 272.95          | 38213.00          |
| 2.25             | 05   | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.                                                                                                                                           | 100.000 | CUM  | 45.70           | 4570.00           |
| 2.27             | 06   | Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming consolidating and dressing complete.                                                                                                                                                                                                                                                     | 10.000  | CUM  | 301.50          | 3015.00           |
| 4.1.9            | 07   | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth                                                                                                                                                                                                                                          | 9.500   | CUM  | 1415.55         | 13447.73          |

CONTRACTOR/ TENDERER

ACCEPTING OFFICER

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BOILER AUXILIARIES PLANT

RANIPET - 632406

**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/14

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO PUBLIC BUILDING TOILETS IN TOWNSHIP.

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                               | QTY       | UNIT | RATE    |   | AMOUNT    |   |
|------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|---------|---|-----------|---|
|                  |      |                                                                                                                                                                                                                                                                                                           |           |      | RS      | P | RS        | P |
|                  |      | level :1:4:8 (1 cement: 4 fine sand : 8 graded stone aggregate 40 mm nominal size)                                                                                                                                                                                                                        |           |      |         |   |           |   |
| 5.9              | 08   | Centering and shuttering including strutting, propping etc. and removal of form for:                                                                                                                                                                                                                      |           |      |         |   |           |   |
| 5.9.1            | 09   | Foundations, footings, bases of columns, etc. for mass concrete.                                                                                                                                                                                                                                          | 50.000    | SQ.M | 119.25  |   | 5962.50   |   |
| 5.9.2            | 10   | Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.                                                                                                                                                                                                          | 152.000   | SQ.M | 180.40  |   | 27420.80  |   |
| 5.9.3            | 11   | Suspended floors, roofs, landings, balconies and access platform.                                                                                                                                                                                                                                         | 92.000    | SQ.M | 187.35  |   | 17236.20  |   |
| 5.9.5            | 12   | Lintels, beams, plinth beams, girders, bressumers and cantilevers                                                                                                                                                                                                                                         | 185.000   | SQ.M | 162.65  |   | 30090.25  |   |
| 5.9.6            | 13   | Columns, Pillars, Piers, Abutments, Posts and Struts                                                                                                                                                                                                                                                      | 142.000   | SQ.M | 238.40  |   | 33852.80  |   |
| 5.9.14           | 14   | Extra for shuttering in circular work in all floors for walls of any thickness attached pillars                                                                                                                                                                                                           | 138.000   | SQ.M | 36.10   |   | 4981.80   |   |
| 5.9.14           | 15   | Extra for shuttering in circular work in all floors for suspended floors, roofs, balcony, lofts etc.                                                                                                                                                                                                      | 92.000    | SQ.M | 37.47   |   | 3447.24   |   |
| 5.22.3           | 16   | Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.<br>Cold twisted bars                                                                                                                                                               | 16400.000 | KG.  | 6.47    |   | 106108.00 |   |
| 5.33             | 17   | Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete work including pumping of concrete to site of laying, but excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions | 91.000    | CUM  | 2023.60 |   | 184147.60 |   |

CONTRACTOR/TENDERER

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**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/14

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO PUBLIC BUILDING TOILETS IN TOWNSHIP.

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                     | QTY     | UNIT | RATE    |   | AMOUNT   |   |
|------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|---------|---|----------|---|
|                  |      |                                                                                                                                                                                                                                                                                                                                 |         |      | RS      | P | RS       | F |
|                  |      | as per IS : 9103 to accelerate/<br>retard setting of concrete, improve<br>workability without impairing<br>strength and durability as per<br>direction of the Engineer - in -<br>charge. M-25 grade Reinforced<br>cement concrete by using 410kg of<br>cement per cum of concrete.<br>All works up to floor V level.            |         |      |         |   |          |   |
| 1.1.2            | 18   | Transportation of surplus earth<br>including loading, leading, unloading<br>& levelling up to 2 KM lead                                                                                                                                                                                                                         | 130.000 | CUM  | 56.41   |   | 7333.30  |   |
| 10.1             | 19   | Structural steel work in single<br>section fixed with or without<br>connecting<br>plate including cutting, hoisting,<br>fixing in position and applying a<br>priming<br>coat of approved steel primer all<br>complete.                                                                                                          | 400.000 | KG   | 6.50    |   | 2600.00  |   |
| 19.19.1          | 20   | Providing and fixing in position pre-<br>cast R.C.C. manhole cover and<br>frame of required shape and approved<br>quality LD-2.5 ( Rectangular shape<br>600x450mm internal dimensions)                                                                                                                                          | 4.000   | EACH | 883.25  |   | 3533.00  |   |
| 18.27.1          | 21   | Providing and laying S&S centrifugally<br>cast (spun) iron pipes (Class LA)<br>conforming to IS - 1536 : 100mm dia<br>pipe                                                                                                                                                                                                      | 45.000  | R.M  | 737.15  |   | 33171.75 |   |
| DATA             | 22   | Laying of PVC/GI pipe line including<br>trenching and refilling after laying<br>the pipe line. Rate to include all<br>labour charges, incidentals, etc.,<br>including transporting of materials<br>from BHEL stores to site of work but<br>excluding pipes & specials which will<br>be supplied free of cost at BHEL<br>stores. | 950.000 | R.M  | 46.90   |   | 44555.00 |   |
| 6.1.1            | 23   | Brick work with F.P.S. bricks<br>of class designation 75 in<br>in foundation and plinth level in:<br>Cement mortar 1:4 (1 cement: 4 coarse<br>sand)                                                                                                                                                                             | 10.000  | CUM  | 1801.30 |   | 18013.00 |   |

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**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

Page 4 of 10**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/14

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO PUBLIC BUILDING TOILETS IN TOWNSHIP.

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | QTY     | UNIT | RATE   |   | AMOUNT   |   |
|------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|---|----------|---|
|                  |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |      | RS     | P | RS       | P |
| 13.1.1           | 24   | 12mm thick cement plaster of mix 1:4 (1 cement : 4 fine sand)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 40.000  | SQ.M | 49.22  |   | 1968.62  |   |
| 13.2.1           | 25   | 15mm cement plaster on th rough side of single or half brick wall of mix: 1:4 (1 cement : 4 fine sand)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 62.000  | SQ.M | 56.47  |   | 3501.31  |   |
| 19.16            | 26   | Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete | 10.000  | EACH | 182.40 |   | 1824.00  |   |
| 5.11             | 27   | Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |         |      |        |   |          |   |
| 5.11.1           | 27A  | Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 327.000 | SQ.M | 106.20 |   | 34727.40 |   |
| 5.38             | 28   | Extra for R.C.CV B.M.C/ R.M.C. work above floor V level for each four floors or part thereof.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 75.000  | CUM  | 92.90  |   | 6967.50  |   |

CONTRACTOR/ TENDERER

ACCEPTING OFFICER

**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

Page 5 of 10**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/14

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO PUBLIC BUILDING TOILETS IN TOWNSHIP.

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | QTY     | UNIT | RATE<br>RS<br>P | AMOUNT<br>RS<br>P |
|------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|-----------------|-------------------|
| 18.31            | 29   | Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) :100 mm diameter Class I                                                                                                                                                                                                                                                                                                    | 2.000   | EACH | 2468.05         | 4936.10           |
| 22.4             | 30   | Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete                                                                                                                                                                                                                                                    |         |      |                 |                   |
| 22.4.1           | 30A  | Serrated with central bulb (225mm wide, 8-11 mm thick).                                                                                                                                                                                                                                                                                                                                                                                                                                | 100.000 | RM   | 386.75          | 38675.00          |
| 5.12             | 31   | 5.12 Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centering, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size). | 0.500   | CU.M | 2913.85         | 1456.93           |
| 4.12             | 32   | 4.12 Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement                                                                                                                                                                                                                                                                                                                                                                          | 20.000  | KG   | 27.45           | 549.00            |

685857.33

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**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

Page 6 of 10**ESTIMATE****PART II**

ESTIMATE REF NO : CF/CP/09/13

NAME OF WORK : **WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO ALL SHOP TOILETS IN FACTORY**

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                         | QTY     | UNIT | RATE    |   | AMOUNT   |   |
|------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|---------|---|----------|---|
|                  |      |                                                                                                                                                                                                                                                                                                                                                                                     |         |      | RS      | P | RS       | P |
| 2.8.1            | 01   | Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soils.    | 70.000  | CUM  | 103.40  |   | 7238.00  |   |
| 2.26.1           | 02   | Extra for every additional lift of 1.5 m or part thereof in all kinds of soils                                                                                                                                                                                                                                                                                                      | 15.000  | CUM  | 18.90   |   | 283.50   |   |
| 2.26.2           | 03   | Ordinary or hard rock.                                                                                                                                                                                                                                                                                                                                                              | 60.000  | CUM  | 33.85   |   | 2031.00  |   |
| 2.9.2            | 04   | Excavation work by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m. 2.9.2 Hard rock (requiring blasting) | 140.000 | CUM  | 272.95  |   | 38213.00 |   |
| 2.25             | 05   | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.                                                                                                                                           | 100.000 | CUM  | 45.70   |   | 4570.00  |   |
| 2.27             | 06   | Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming consolidating and dressing complete.                                                                                                                                                                                                                                                     | 10.000  | CUM  | 301.50  |   | 3015.00  |   |
| 4.1.9            | 07   | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth                                                                                                                                                                                                                                          | 9.500   | CUM  | 1415.55 |   | 13447.73 |   |

CONTRACTOR/ TENDERER

ACCEPTING OFFICER

**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

Page 7 of 10**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/13

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO ALL SHOP TOILETS  
IN FACTORY

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                      | QTY       | UNIT | RATE<br>RS<br>P | AMOUNT<br>RS<br>I |
|------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|-----------------|-------------------|
|                  |      | level :1:4:8 (1 cement: 4 fine sand :<br>8 graded stone aggregate 40 mm nominal<br>size)                                                                                                                                                                                                                                         |           |      |                 |                   |
| 5.9              | 08   | Centering and shuttering including<br>strutting, propping etc. and<br>removal of form for:                                                                                                                                                                                                                                       |           |      |                 |                   |
| 5.9.1            | 09   | Foundations, footings, bases of<br>columns, etc. for<br>mass concrete.                                                                                                                                                                                                                                                           | 50.000    | SQ.M | 119.25          | 5962.50           |
| 5.9.2            | 10   | Walls (any thickness) including<br>attached pilasters,<br>butteresses, plinth and string courses<br>etc.                                                                                                                                                                                                                         | 152.000   | SQ.M | 180.40          | 27420.80          |
| 5.9.3            | 11   | Suspended floors, roofs,<br>landings, balconies and<br>access platform.                                                                                                                                                                                                                                                          | 92.000    | SQ.M | 187.35          | 17236.20          |
| 5.9.5            | 12   | Lintels, beams, plinth beams, girders,<br>bressumers and cantilevers                                                                                                                                                                                                                                                             | 185.000   | SQ.M | 162.65          | 30090.25          |
| 5.9.6            | 13   | Columns, Pillars, Piers, Abutments,<br>Posts and Struts                                                                                                                                                                                                                                                                          | 142.000   | SQ.M | 238.40          | 33852.80          |
| 5.9.14           | 14   | Extra for shuttering in circular work<br>in all floors for walls of any<br>thickness attached pillars                                                                                                                                                                                                                            | 138.000   | SQ.M | 36.10           | 4981.80           |
| 5.9.14           | 15   | Extra for shuttering in circular work<br>in all floors for suspended floors,<br>roofs, balcony, lofts etc.                                                                                                                                                                                                                       | 92.000    | SQ.M | 37.47           | 3447.24           |
| 5.22.3           | 16   | Reinforcement for R.C.C. work<br>including straightening, cutting,<br>bending, placing in position and<br>binding all complete.<br>Cold twisted bars                                                                                                                                                                             | 16400.000 | KG.  | 6.47            | 106108.00         |
| 5.33             | 17   | Providing and laying in<br>position machine batched, machine<br>mixed and machine vibrated design mix<br>cement concrete work including pumping<br>of concrete to site of laying, but<br>excluding the cost of centering,<br>shuttering finishing and<br>reinforcement including cost of<br>admxtures in recommended proportions | 91.000    | CUM  | 2023.60         | 184147.60         |

CONTRACTOR/ TENDERER

ACCEPTING OFFICER

**BHARAT HEAVY ELECTRICALS LIMITED**BOILER AUXILIARIES PLANT  
RANIPET - 632406**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/13

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO ALL SHOP TOILETS  
IN FACTORY

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                       | QTY      | UNIT | RATE    |   | AMOUNT    |   |
|------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|---------|---|-----------|---|
|                  |      |                                                                                                                                                                                                                                                                                                                                   |          |      | RS      | P | RS        | P |
|                  |      | as per IS : 9103 to accelerate/<br>retard setting of concrete, improve<br>workability without impairing<br>strength and durability as per<br>direction of the Engineer - in -<br>charge. M-25 grade Reinforced<br>cement concrete by using 410kg of<br>cement per cum of concrete.<br>All works up to floor V level.              |          |      |         |   |           |   |
| 1.1.2            | 18   | Transportation of surplus earth<br>including loading, leading, unloading<br>& levelling up to 2 KM lead                                                                                                                                                                                                                           | 130.000  | CUM  | 56.41   |   | 7333.30   |   |
| 10.1             | 19   | Structural steel work in single<br>section fixed with or without<br>connecting<br>plate including cutting, hoisting,<br>fixing in position and applying a<br>priming<br>coat of approved steel primer all<br>complete.                                                                                                            | 400.000  | KG   | 6.50    |   | 2600.00   |   |
| 19.19.1          | 20   | Providing and fixing in position pre-<br>cast R.C.C. manhole cover and<br>frame of required shape and approved<br>quality LD-2.5 ( Rectangular shape<br>600x450mm internal dimensions)                                                                                                                                            | 4.000    | EACH | 883.25  |   | 3533.00   |   |
| 18.27.1          | 21   | Providing and laying S&S centrifugally<br>cast (spun) iron pipes (Class LA)<br>conforming to IS - 1536 : 100mm dia<br>pipe                                                                                                                                                                                                        | 45.000   | R.M  | 737.15  |   | 33171.75  |   |
| DATA             | 22   | Laying of PVC/GI pipe line including<br>trenching and refilling after laying<br>the pipe line. Rate to include all<br>labour charges, incidentals, etc.,<br>including transporting of materials<br>from BHEL stores to site of work but<br>excluding pipes & specials which will<br>be supplied free of cost at BHEL /<br>stores. | 2800.000 | R.M  | 46.90   |   | 131320.00 |   |
| 6.1              | 23   | Brick work with F.P.S. bricks of<br>class designation 75 in<br>foundation and plinth in:                                                                                                                                                                                                                                          |          |      |         |   |           |   |
| 6.1.1            | 23A  | Cement mortar 1:4 (1 cement : 4 coarse<br>sand)                                                                                                                                                                                                                                                                                   | 10.000   | CUM  | 1801.30 |   | 18013.00  |   |

CONTRACTOR/ TENDERER

ACCEPTING OFFICER

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BOILER AUXILIARIES PLANT

RANIPET - 632406

**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/13

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO ALL SHOP TOILETS  
IN FACTORY

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | QTY     | UNIT | RATE<br>RS<br>P | AMOUNT<br>RS<br>P |
|------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|-----------------|-------------------|
| 13.1.1           | 24   | 12mm thick cement plaster of mix 1:4<br>(1 cement : 4 fine sand)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 40.000  | SQ.M | 49.22           | 1968.62           |
| 13.2.1           | 25   | 15mm cement plaster on th rough side<br>of single or half brick wall of mix:<br>1:4 (1 cement : 4 fine sand)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 62.000  | SQ.M | 56.47           | 3501.31           |
| 19.16            | 26   | Providing orange colour safety foot<br>rest of minimum 6 mm thick plastic<br>encapsulated as per IS : 10910 on 12mm<br>dia steel bar conforming to IS : 1786<br>having minimum cross section as 23<br>mmx25mm and over all minimum length<br>263 mm and width as 165mm with minimum<br>112 mm space between protruded legs<br>having 2 mm tread on top surface by<br>ribbing or chequering besides<br>necessary and adequate anchoring<br>projections on tail length on 138 mm<br>as per standard drawing and suitable<br>to with stand the bend test and<br>chemical resistance test as per<br>specifications and having<br>manufacture's permanent identification<br>mark to be visible even after fixing,<br>including fixing in manholes with<br>30x20x15 cm cement concrete block<br>1:3:6 (1 cement : 3 coarse sand : 6<br>graded stone aggregate 20 mm nominal<br>size) complete | 10.000  | EACH | 182.40          | 1824.00           |
| 5.11             | 27   | Extra for additional height in<br>centering, shuttering where ever<br>required with adequate bracing,<br>propping etc. including cost of<br>de-shuttering and decentering at all<br>levels, over a height of 3.5<br>m, for every additional height of 1<br>metre or part thereof (Plan<br>area to be measured)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |      |                 |                   |
| 5.11.1           | 27A  | Suspended floors, roofs, landing,<br>beams and<br>balconies (Plan area to be measured).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 327.000 | SQM  | 106.20          | 34727.40          |
| 5.38             | 28   | Extra for R.C.C./ B.M.C/ R.M.C. work<br>above floor V level for each<br>four floors or part thereof.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 75.000  | CUM  | 92.90           | 6967.50           |
| 18.31            | 29   | C.I. SLUICE VALVES/ FIRE HYDRANTS &<br>FIXTURES<br>Providing and fixing C.I. sluice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.000   | EACH | 2468.05         | 2468.05           |

CONTRACTOR/ TENDERER

ACCEPTING OFFICE

Page 10 of 10**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

**ESTIMATE**

ESTIMATE REF NO : CF/CP/09/13

NAME OF WORK : WATER SUPPLY SCHEME TO PROVIDE WELL WATER SUPPLY TO ALL SHOP TOILETS IN FACTORY

| CPWD 2007<br>REF | SLNO | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | QTY     | UNIT | RATE    |   | AMOUNT   |
|------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|---------|---|----------|
|                  |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |      | RS      | P |          |
|                  |      | valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) : 100mm dia Class I                                                                                                                                                                                                                                                                                                                                          |         |      |         |   |          |
| 22.4             | 30   | Providing and placing in position suitable PVC water stops conforming to IS:12200 for construction / expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete                                                                                                                                                                                                                                                   |         |      |         |   |          |
| 22.4.1           | 30A  | erated with central bulb (225mm wide, 8-11 mm thick)                                                                                                                                                                                                                                                                                                                                                                                                                                   | 100.000 | R.M  | 358.85  |   | 35885.00 |
| 5.12             | 31   | 5.12 Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centering, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size). | 0.500   | CUM  | 2913.85 |   | 1456.93  |
| 4.12             | 32   | Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.                                                                                                                                                                                                                                                                                                                                                                              | 20.000  | KG   | 27.45   |   | 549.00   |

76,564.28

Total estimated value of Part I &amp; Part II = 14,53,221.61 (A)

Contractor's Tender percentage @ ABOVE / BELOW / AT PAR .....% = (B)  
(Percentage in words)

Sub Total (A + B) =

Service Tax @ ..... % = (C)  
Service Head.....

Total Value of work : (A + B + C) =

CONTRACTOR/ TENDERER

ACCEPTING OFFICER

**SPECIAL CONDITIONS OF CONTRACT**

1. The tenderer shall quote a percentage above or below or at par, the rates shown in the Bill of Quantities based on CPWD DSR 2007. The percentage quoted shall be clearly written both in words and figures.
2. The quoted percentage will apply to the individual items uniformly.
3. The above rates does not include PF & ESI remittance .The tenderer shall quote inclusive of PF & ESI contribution to their workers.
4. Items of work other than those mentioned in Bill of Quantities will have to be carried out at the rates to be fixed by this organization. The same offered percentage will be applicable with reference to CPWD DSR 2007.
5. Water will be supplied on chargeable basis @ 1% of the contract value and Power & compressed air will be provided free of charges from the nearest tapping point subject to availability. The contractor should make necessary arrangement for tapping the same. In case BHEL is not able to provide the same the contractor has to make their own arrangement for completion of the work at their own cost.
6. Safety precautions should be taken while doing the work. You will have to follow all safety requirements to carry out the work inside the factory premises.
7. All materials shall confirm to the latest IS/IRC specifications
8. All the works to be carried out strictly as per the specifications laid down in Tamil Nadu Building practice and also satisfying relevant IS/IRC specifications.
9. Cement, Reinforcement steel, Structural steel and AC sheet will be issued at free of cost. Cement and Reinforcement steel will be issued free of cost for theoretical consumption and at a recovery rate of Rs. 6,325.00 / MT and Rs. 41,975.00 / MT respectively. Structural steel and AC sheets will also be issued free of cost for theoretical consumption and at a recovery rate of Rs. 46,500.00 / MT and Rs. 140.00 / Sqm respectively. Upto 5% over and above the theoretical consumption beyond which penal recovery will be effected at the double the rates specified above.

10. Once the work is completed the contractor should remove all the unwanted materials from the site time to time and it should be disposed off as per the instructions of Engineer-in-charge without any further delay.
11. All the rates are inclusive of scaffolding charges, sundries & contingencies, carriage of materials, cost of brush, sand paper, ladder, gum, putty, turpentine, caustic soda or washing soda, mixing charges etc., complete.
12. All works shall be carried out as per standard specifications and instructions of Engineer-in-charge.
13. Base preparation, mixing ratio, etc. shall be as per the recommendations of the manufacturer.
14. All materials, colour, shade, brand, etc. shall be got approved from the Engineer-in-charge before the start of the work and shall conform to the latest IS/IRC specifications..
15. The current minimum wages per day for USW is Rs.149.00/day
16. Coefficient of consumption for paint, distemper, cement, etc. shall be as per CPWD 2007 data.
17. The contractor have to follow all statutory requirements like PF,ESI, etc., throughout the contract period.
18. The General conditions of contract in force shall apply to this contract.
19. The contractor is required to engage a Degree / Diploma holder Engineer throughout the contract period.
20. Time is essence of the contract. Any delay beyond the delivery date will be subjected to LD.
21. The tenderer may visit the site and assess location before quoting the rate.

## **22. CONTRACT CONDITIONS ON TAXES & DUTIES**

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

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