

# TENDER

**TENDER NOTIFICATION NO. - FCX/20211027**

FOR

**Repair & Maintenance of various civil structures/  
installations inside factory area.**

**PRICE BID**



**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION**

**BHARAT HEAVY ELECTRICALS LIMITED**

**(A Government of India Undertaking)**

**BHOPAL – 462 022 (M.P)**

## PREAMBLE OF PRICE BID

**1.0** This Price Bid consists of Three Schedule:

### **1.1 Schedule A**

Schedule A consists of Two Annexure:

The evaluation currency for this tender shall be INR. Total price of the package combining **Annexure I & Annexure II** to be quoted by the bidders which shall form the basis for comparison for deciding lowest bid. For further processing and award, total quoted amount by the L1 (lowest) bidder for the package shall be used for deriving individual item rate by BHEL based on % (percentage) weightage specified at Annexure I & Annexure II of Price Schedule.

### **1.2 Schedule B**

It consists of details of free issue materials by BHEL.

### **1.3 Schedule C**

It consists of details of tools & tackles provided by BHEL either on higher basis or on free of cost basis which are mentioned in price bid.

**2.0** The work to be carried out under the contract shall, except as otherwise provided in tender conditions, include all labour, materials, tools, plant, equipment, and transport which may be required in preparation of and for full & entire execution and completion of the Works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles as laid down in Technical Specification & elsewhere in Tender Specification.

**3.0** The price bid should not contain any condition. Conditional price Bids shall be summarily rejected.

**4.0** The bidder should not leave any column blank in Price Schedules.

**5.0** Price Quoted shall include all taxes, & duties except **GST**.

**6.0** Unless otherwise specified in the items involving cement, reinforcement steel or structural steel, these items shall be issued free of cost by BHEL.

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule**

Name of work : Repair & Maintenance of various civil structures/ installations inside factory area.

	Details ANNEXURE	Total Amount (in Rs.) (To be quoted by bidder here)
	Total price of the package combining of Annexure-I & Annexure-II.	

Amount in words: Rs.

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**NOTE:**

- 1 The evaluation currency for this tender shall be INR. Total price of the package combining of **Annexure-I & Annexure-II** to be quoted by the bidders which shall form the basis of comparison for deciding lowest bid.  
For further processing & award total quoted Amount for the package by the L1 (lowest) bidder shall be used for deriving Individual item rate by BHEL based on % (percentage) weightage specified at Annexure-I , Annexure-II & Annexure-III of Price Schedule.
- 2 In case of “discrepancy in words and figures”, the same shall be adjusted in accordance with following rule:
  - (a) If, in the price structure quoted for the required goods/ services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
  - (b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.
  - (c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.
  - (d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.

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**Price Schedule : Anneuxre - I**

Name of work : Repair & Maintenance of various civil structures/ installations inside factory area.

Sr. No.	Based on DSR'12	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1		Carriage of material by Mechanical transport including, loading, unloading & stacking of..			
	1.1.1	Lime, moorum, building rubbish 1 km lead	3.00	cum	0.0587
	1.1.2	Earth - 1 Km lead	181.00	cum	4.4236
	1.1.11	Steel - 1 Km lead	1.00	tonne	0.0174
2		Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift upto 1.5 m, disposed soil to be levelled and neatly dressed :			
	2.1.1	All kinds of soil.	13.00	sqm	0.1453
3		Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m; disposed earth to be levelled and neatly dressed.			
	2.6.1	All kind of soil	181.00	cum	6.9122
4	2.25	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.	3.00	cum	0.0742
5		Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.			
	2.26.1	All kinds of soil.	1.00	cum	0.0102
6		Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:( <b>cement which shall be supplied free of cost by BHEL</b> )			
	4.1.3	a) 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ).	10.00	cum	7.6065
	4.1.8	b) 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size ).	5.00	cum	3.7330
7		Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work upto plinth level. ( <b>cement which shall be supplied free of cost by BHEL</b> )			
	5.1.2	a) 1 : 1.5 : 3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	5.00	cum	3.9800

Seal and Signature of Bidder

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Seal and Signature of BHEL Authority

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	5.1.3	b) 1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	20.00	cum	16.3340
8	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size). <b>(cement which shall be supplied free of cost by BHEL)</b>	1.00	cum	1.0501
9		Centering and shuttering including strutting, propping etc. and removal of form for :			
	5.9.1 ana*	a) Foundations, footings, bases of columns, etc. for mass concrete. <b>(Excluding the cost of material which shall be issued free of cost by BHEL)</b>	3.00	sqm	0.0789
	5.9.1	b) Foundations, footings, bases of columns, etc. for mass concrete.	31.00	sqm	1.4232
	5.9.3	d) Suspended floors, roofs, landings, balconies and access platform.	2.00	sqm	0.1779
	5.9.5	e) Lintels, beams, plinth beams, girders, bressumers and cantilevers.	1.00	sqm	0.0742
	5.9.6	f) Columns, pillars, piers, abutments, posts and struts.	1.00	sqm	0.1032
10	Ana. 5.22A.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. <b>(Reinforcement bars will be supplied free of cost from BHEL store).</b>			
		Thermo-Mechanically Treated bars.	1058.00	Kg	2.3115
11		Coursed rubble masonry (second sort) with hard stone in foundation & plinth with <b>(Excluding the cost of cement and stone which shall be supplied free of cost by BHEL):-</b>			
	Ana 7.7.1	Cement mortar 1:6 ( 1 cement : 6 coarse sand).	2.00	cum	1.6264
12		Coursed rubble masonry (second sort) with hard stone in foundation & plinth with <b>(Excluding the cost of cement which shall be supplied free of cost by BHEL):-</b>			
	7.7.1	Cement mortar 1:6 ( 1 cement : 6 coarse sand).	1.00	cum	0.5456

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Sr. No.	Based on DSR'12	Item Description	Qty.	Unit	% Weightage of item amount against total amount
13	8.2	Providing and fixing 18 mm thick gang saw cut mirror polished premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1 : 4 (1 cement : 4 coarse sand) joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. <b>(Excluding the cost of cement which shall be supplied free of cost by BHEL):-</b>			
	8.2.2	Granite of any colour and shade			
		Area of slab over 0.50 sqm	3.00	sqm	2.3109
14	Ana. 10.1	Structural steel work in single section fixed without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. <b>(Structural steel &amp; primer will be issued free of cost from BHEL stores).</b>	50.00	Kg	0.1174
15		Structural steel work riveted ,bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. <b>(Structural steel &amp; primer will be issued free of cost from BHEL stores).</b>	2656.00	Kg	10.2332
16	11.4	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener concrete consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume. Hardening compound is mixed @ 2 litre per 50 kg of cement or as per manufactures specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete. <b>(Excluding cost of cement which shall be supplied free of cost by BHEL)</b>	1.00	sqm	0.0829

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Sr. No.	Based on DSR'12	Item Description	Qty.	Unit	% Weightage of item amount against total amount
17	11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS:15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of Cement Mortar 1:3 (1 Cement :3 Coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete. <b>(excluding cost of cement which shall be supplied free of cost by BHEL)</b>	3.00	sqm	0.5217
18	11.37	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours, such as White, Ivory, Grey, Fume, Red Brown, laid on 20mm thick Cement Mortar 1:4 (1 cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc. complete. <b>(Excluding the cost cement which shall be supplied free of cost by BHEL):-</b>	3.00	sqm	0.5322
19	**	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc. complete.. <b>(Excluding cost of cement which shall be supplied free of cost by BHEL)</b>			
	11.41.2	Size of Tile 600x600 mm	39.00	sqm	12.7279
20	11.42	Deduct for not using 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) bedding in laying of floor tiles. <b>(Excluding cost of cement which shall be supplied free of cost by BHEL)</b>	39.00	sqm	-3.2983
21	11.43	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness.	39.00	sqm	3.7139
22	**	12 mm cement plaster of mix: <b>(excluding cost of cement which shall be supplied free of cost by BHEL)</b>			
	13.4.2	1 : 6 (1 cement : 6 coarse sand) .	6.00	sqm	0.1757

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Sr. No.	Based on DSR'12	Item Description	Qty.	Unit	% Weightage of item amount against total amount
23	**	15 mm cement plaster on rough side of single or half brick wall of mix:( <b>excluding cost of cement which shall be supplied free of cost by BHEL</b> )			
	13.5.2	1 : 6 (1 cement : 6 coarse sand).	13.00	sqm	0.4389
24	**	20 mm cement plaster of mix:( <b>excluding cost of cement which shall be supplied free of cost by BHEL</b> )			
	13.6.2	1 : 6 (1 cement : 6 coarse sand).	3.00	sqm	0.1200
25	**	6 mm cement plaster of mix:( <b>excluding cost of cement which shall be supplied free of cost by BHEL</b> )			
	13.16.1	1 : 3 (1 cement : 3 fine sand).	31.00	sqm	0.7267
26		Painting with synthetic enamel paint of approved brand and manufacture to give an even shade.( <b>Paint free issue from BHEL store.</b> )			
	Ana. 13.61.1	Two or more coats on new work.	13.00	sqm	0.1361
27	**	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks with cement concrete 1 : 3 : 6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground within 50 metres lead:( <b>excluding cost of cement which shall be supplied free of cost by BHEL</b> )			
	14.2.1	Door chowkhats.	1.00	each	0.1650
28		Painting with synthetic paint of approved brand and manufacture of required colour to give an even shade:( <b>Synthetic paint free issue by BHEL store</b> )			
	Ana 14.54.1	One or more coats on old work.	3.00	sqm	0.0214
29		Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-charge:			
a)	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	2.00	cum	0.3962
b)	15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	1.00	cum	0.1221



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**Price Schedule : Anneuxre - I**

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Sr. No.	Based on DSR'12	Item Description	Qty.	Unit	% Weightage of item amount against total amount
30	15.3	Demolishing RCC work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	1.00	cum	0.2890
31		Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :			
	15.7.4	In cement mortar.	1.00	cum	0.1673
22		Demolishing stone rubble masonry manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge:			
	15.9.2	In cement mortar	1.00	cum	0.1996
33		Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead:			
	15.13.1	a) Of area 3 sqm and below.	1.00	each	0.0117
	15.13.2	b) Of area beyond 3 sqm.	1.00	each	0.0155
34	15.19	Dismantling steel work manually / by mechanical means in built up sections without dismembering and stacking within 50 meters lead. as per direction of Engineer-in-charge.	125.00	Kg	0.0387
35		Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50metres lead:			
	15.23.1	a) For thickness of tiles 10 mm to 25 mm.	39.00	sqm	0.2337
36	15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	331.00	sqm	7.2022
37	15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	10.00	kg	0.0300
38		Dismantling manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.			
	15.43.1	a) Water bound macadam road	1.00	sqm	0.0182
	15.43.2	b) Bituminous road	3.00	sqm	0.1062

Seal and Signature of Bidder

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**Price Schedule : Anneuxre - I**

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Sr. No.	Based on DSR'12	Item Description	Qty.	Unit	% Weightage of item amount against total amount
39	Ana 16.18.1	Fencing with angle iron post placed at required distance embedded in cement concrete blocks and every 15th post, last but one end post and corner post shall be struted on both sides and end post on one side only, provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire 9.38 kg per 100 metres (minimum) between the two posts fitted and fixed with G.I. staples etc. complete.(cost of posts, struts, earth work and concrete work to be paid for separately):Payment to be made per metre cost of total length of barbed wire used. <b>(Excluding cost of barbed wire which shall be supplied free of cost by BHEL)</b>	50.00	Metre	0.0288
40	** 18.77	Cutting holes up to 15x15 cm in RCC floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof. <b>(excluding cost of cement which shall be supplied free of cost by BHEL)</b>	1.00	each	0.0414
<b>Total : Annexure I</b>					<b>88.3123</b>

## FACTORY CIVIL CONSTRUCTION &amp; MAINTENANCE DIVISION

## Price Schedule : Anneuxre - II

Name of work : Repair &amp; Maintenance of various civil structures/ installations inside factory area.

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1	Brick work with Ghol bricks of class designation 50 and above in foundation and plinth in cement mortar 1:6 (1 cement : 6 coarse sand) : <b>(Cement free issue by the Deptt.)</b>	1.00	cum	0.9620
2	Brick work with Ghol bricks of class designation 50 and above in superstructure above plinth level up to floor V level in all shapes and sizes in cement mortar 1:6 (1 cement : 6 coarse sand). <b>(Cement free issue by the Deptt.)</b>	3.00	cum	3.1445
3	Half brick masonry with Ghol bricks of class designation 50 and above in foundations and plinth in: Cement mortar 1 : 4 (1 cement : 4 coarse sand) . <b>(Cement free issue by the Deptt.)</b>	1.00	sqm	0.1070
4	Half brick masonry with Ghol bricks of class designation 50 and above in superstructure above plinth level up to floor V level: Cement mortar 1 : 4 (1 cement : 4 coarse sand) . <b>(Cement free issue by the Deptt.)</b>	1.00	sqm	0.1021
5	Supplying and filling in plinth with stone dust under floors, including watering, ramming, consolidating and dressing complete.	8.00	cum	1.0247
6	40 mm thick fine dressed stone flooring over 20 mm (average) thick moorum base with joints finished flush in cement mortar 1:5 (1 cement : 5 coarse sand). <b>(excluding cost of cement and sand stone which shall be supplied free of cost by BHEL)</b>			
	Red sand stone.	196.00	sqm	6.3474
	<b>Total : Annexure II</b>			11.6877
	<b>Total : Annexure I + Annexure II</b>			100.0000

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION**

**Price Schedule : B**

Name of work : Repair & Maintenance of various civil structures/ installations inside factory area.

The following material free issue from BHEL stores.

- 1 Cement
- 2 Reinforcement Steel.
- 3 Structural steel
- 4 Red oxide zinc chromate primer
- 5 Synthetic enamel paint
- 6 Red sand stone against item no 6 of Annexure-II
- 7 A.C. Sheets / Non-A.C. Sheets
- 8 Barbed wire

**Price Schedule : C**

Name of work : Repair & Maintenance of various civil structures/ installations inside factory area.

- 1 Electricity charges at Rs.66.00/- per M.T. of fabrication of structural steel

Hire charges.

- i) Drill machine @ 252.00/- per day
- ii) Jack Hammer @ 108.00/- per day



(Subject to availability)

Drill machine/jack hammer rod Rs. 100.00 per rod