



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM::HYDERABAD::32
FACTORY CIVIL ENGINEERING DEPARTMENT

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-35/15-16, Dt: 05.01.2016

PRICE BID

Item no.: 2

Name of work:- Modification – providing galvalume sheet roofing, painting works and black topping works etc. to boiler house.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1	Dismantling reinforced cement concrete / plain cement concrete and disposing of debris upto to a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete.	5.00	Cu.m	1,054.10	5,270.50
2	Removal Existing roof/side cladding of AC Sheets roofing, louvers side cladding including loading, carting, unloading etc., with in the premises up to a lead of 2 km as directed by engineer-in-charge.	1,500.00	Sqm	43.65	65,475.00
3	Removal of wood scrap/ MS scrap and garbage collected in the dust bins inside Factory area and open areas and conveying the garbage/scrap to the respective dumping yards to a lead of 2 km as directed by the Engineer In Charge. The rate includes cost of labours , required tractors, tools etc. all complete all as directed by engineer-in-charge.				
a	Wood Scrap including dismantling the boxes kept out side the blocks in to pieces and stacking the same as directed by Engineer-in-charge.	5.00	MT	535.05	2,675.24
b	MS scrap including MS packing strips etc.	2.00	MT	401.29	802.58
4	Earth work in excavation in all soils by mechanical means (Hydraulic Excavators) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50M etc. complete all as directed by Engineer-in-charge.	30.00	Cu.m	130.80	3,924.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size) etc. complete all as directed by engineer-in-charge.	5.00	Cu.M	2,606.00	13,030.00
6	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size) etc. complete all as directed by engineer-in-charge.	10.00	Cu.M	2,772.00	27,720.00
7	Plastering in CM 1:6, 20 mm thick to internal and external surfaces of walls including the cost of all materials, labour, curing etc., complete -Upto 10.00 M level etc. complete all as directed by engineer-in-charge.	50.00	Sq.m	124.00	6,200.00
8	Cement Plaster to ceiling /walls with 12mm thick cement plaster finished with a floating coat of neat cement of mix 1:3 (1 cement : 3 fine sand) etc. complete all as directed by engineer-in-charge.	10.00	Sq.m	110.30	1,103.00
9	Providing and fixing in true horizontal level 600 mm x 600mm false ceiling system manufactured by M/s. Armstrong World Industries using DUNE SUPREME RH 99 MICROLOOK EDGE WITH SILHOUETTE GRID, using hot dipped galvanized steel section, rotary stitched main tee of size 15mm x 42 mm web height, having 0.36 mm gauge at every 600 mm centre to centre maximum and rotary stitched cross tee of size 15 mm x 42 mm, having 0.33 mm gauge at every 600 mm. c/c. and wall angle of size 19 x 19 mm., having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 600mm c/c. in both directions using 2.0 mm. thick pre-straightened GI wire, and laying Dune Supreme Microlook Edge ceiling tiles manufactured by M/s. Armstrong World Industries, of size 600mmx600mmx15mm having NRC 0.50, Light reflectance of >85% (WT), thermal conductivity k = 0.052-0.057 W/m0K, Humidity Resistance of 99% (having LIFETIME GUARANTEE against SAG), having Fire Performance CLASS O / CLASS 1 (BS 476), surface having 3 coats of white paint - crisp finely granulated with micro perforations etc. complete all as directed by engineer-in-charge.	55.00	Sq.m	1,302.00	71,610.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
10	Applying exterior emulsion paint 2 coats over one coat of primer to external new plastered surfaces including cost of all labour and other incidentals. (only exterior paint will be issued by BHEL on free of cost and primer will be supplied by contractor) etc. complete all as directed by engineer-in-charge.	900.00	Sq.m	37.10	33,390.00
11	Applying two coats of oil bound distemper of given shade including through cleaning of the surfaces, cost of all labour and other incidentals. (Only OBD will be issued by BHEL on FREE of cost at their stores) etc. complete all as directed by engineer-in-charge.	1,500.00	Sq.m	34.60	51,900.00
12	Supply and fixing of top fixed, side hung of NCL Seccolor Ajantha windows & Ventilators fabricated from Roll formed section made of pre painted steel (Base steel as per IS 513 of 0.6 mm thick, 'D' quality, galvanized as per IS 277 with zinc 120 GSM / Sq. Mtr). Section for shutter should be of 46 x 46 mm, external frame should be of 46 x 52 mm, section for glass beading should be of 18 x 25 mm & center mullion should be 46 x 70 mm. The sections to be cut to length, meter joined with corner bracket. Centre mullions are to be fixed using mullion cap. Handle made of high grade aluminium powder coated & with nylon receiver & glazed with 5 mm thick, Modi/Saint Gobain float glass. Gasket made of E.P.D.M. Corner brackets made of C.R.C.A with zinc phosphating. Mullion caps made of glass filled nylon etc. complete all as directed by engineer-in-charge.	27.00	Sq.m	2,820.00	76,140.00
13	Supply and fixing of new "Parry ware" make Indian Water Closet, Orissa pan of size 580 mm x 410 mm - Open rim (Code No. C0109) including PVC Slimline Dual Flush tank (Cistern) of size 475 mm x 318 mm (Code No. C8109) with all accessories like Parryware flush kit suitable for the above flush tank with all required accessories etc., complete. Colour: Silky Off - White etc. complete all as directed by engineer-in-charge.	2.00	Each	3,000.00	6,000.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
14	Fabrication of structural steel work including all materials going into the process of fabrication and forming an integral part of steel work together with all shop and site rivets and electrodes for site welding as necessary and all site connections comprising sag rods, floor beams, girders, bracings, trusses and frame work for fixed false ceiling and for movable false ceiling, purlins with channel / angles, MS flat supports including all connections as per detailed drawings connected steel works etc., cleats, gusset plates, all bolts, nuts, washers, base plates, anchor bolts as per detailed drawings, cutting, welding and painting 2 coats of red-oxide primer before erection etc., complete. The rate shall include painting 2 coat of Red-oxide as per IS specifications and all charges for handling, leading and loading at the fabrication yard. The raw structural steel sections, electrodes, gasses will be issued by BHEL on FREE of cost at BHEL stores etc. complete all as directed by engineer-in-charge.	10.00	MT	8,871.00	88,710.00
15	Erection of Steel work out lined in item No.14 above including the charges for handling, leading and stacking at site at approved locations prior to erection including all site rivetting, bolting, jointing and site welding where ever required etc. complete all as directed by engineer-in-charge.	10.00	MT	3,802.00	38,020.00
16	Preparation of subgrade by excavation earth to an average of 22.5 cm, dressing to camber and consolidation with road roller including making good the undulations etc. and disposal of surplus earth lead upto 50 m etc. complete all as directed by engineer-in-charge.	1,950.00	Sq.m	61.25	1,19,437.50
17	Rolling with power road roller 8T to 10T capacity to required compacting .(Hire charges)	7.00	Days	1,000.00	7,000.00
18	Providing Boulder to required thickness of minimum 230mm using hard granite stone boulders and 25% granite metal of 38.1 to 76 mm (1-1/2" to 3") gauge for opacking and 20% gravel for filling interstices etc.; complete all as directed by Engineer-in-charge.	450.00	Cu.M	729.00	3,28,050.00
19	Supply and stacking of graded stone aggregate at site of size range of 63 mm to 45 mm in two layers of 100 mm thick.	390.00	Cu.M	1,100.80	4,29,312.00
20	Supply and stacking at site moorum and spreading at site as directed by Engineer-In-Charge	130.00	Cu.m	624.45	81,178.50

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
21	Laying water bound macadam 2 layers of 100 MM consolidated thickness each with stone aggregate , stone screening and blinding material including screening, sorting , spreading to template and consolidation with power road roller of 8 to 10 tonne capacity etc., complete.-base course with 63 mm to 45 mm size including stone screening 13.20 mmm size.(Payment for stone aggregate, screening and murram are to be paid separately) etc. complete all as directed by engineer-in-charge.	390.00	Cu.m	330.15	1,28,758.50
22	Providing and applying tack coat using bitumen emulsion(Rapid Setting) complying with IS 8887-1995,spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface on W.B.M@0.4kg/Sqm etc. complete all as directed by engineer-in-charge.	1,950.00	Sq.m	14.25	27,787.50
23	Providing and laying Bitumen penetration Macadam with hard stone aggregate of quality size and grading as specified, with bitumen of suitable penetration grade including required key aggregate as specified, spreading coarse aggregate with the help of self propelled/tipper tail mounted aggregate spreader and applying bitumen by a pressure distributor and then spreading key aggregate with the help of aggregate spreader complete including consolidation with road roller of minimum 8 to 10 tonne capacity to achive specified values of compaction and surface accuracy for 50mm compacted thickness using coarse aggregate of size 50-20 mm graded at @ 0.60cum per 10 sqm key aggregate of size 12.5 mm graded @ 0.15cum per 10sqm.with paving asphalt 80/100@ 50kg/sqm etc. complete all as directed by engineer-in-charge.	1,950.00	Sq.m	355.30	6,92,835.00
24	Supply and fixing 80mm dia C.I. sluice valves conforming to IS 14846/2000 with operating wheel , flanged joints rubber insertion with bolts, nuts and washers . The rates are including transportation charges and excluding excise duty and sale tax etc. complete all as directed by engineer-in-charge.	1.00	No.	4,298.00	4,298.00
25	Supply & painting at site of all structural steel work with 2 coats of acid proof paint of approved shade to trusses, columns, girders, bracings etc., as required etc. complete all as directed by engineer-in-charge.	3,000.00	Sqm	50.50	1,51,500.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
26	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement :2 fine sand) including testing of joints etc. complete - 250mm dia R.C.C pipe etc. complete all as directed by engineer-in-charge.	40.00	RM	620.85	24,834.00
27	Constructing Brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand:6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement :2coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design. - 0.91 M deep with S.F.R.C cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 Kg; fixed in cement concrete 1:2:4 (1 cement :2coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately). - with FPS Bricks class designation 75 etc. complete all as directed by engineer-in-charge.	2.00	each	5,457.00	10,914.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
28	Supply & Fixing of coloured galvalume aluminium zinc alloy coated metallic hirib profile sheet of nominal 1000-1080mm effective cover width or suitable to site conditions upto a length of 12m with Factory cut and 28-30 mm deep ribs with subtle square fluting in the five pan at nominal 202-205mm center-to-center. The end rib shall be designed for anti-capillary action, to avoid any seepage of water through the lateral overlap. The feen material is manufactured out of nominal 0.45mm base metal thickness (BMT) or 0.5 mm TCT, Hi-Strength steel with minimum 550 MPa yield strength metallic hot dip coated with aluminium -Zinc alloy (55 % Aluminium ,45 % Zinc)as per AS 1397-Zincalume AZ150 (Min 150 Grams / Sq.Mt) Total on both sides). The steel manufactures test certificate for the certificate for the chemical and mechanical properties of steel must be submitted for approval by the engineer-in-charge. The payment will not be made for overlapping, the overlapping shall be upto 300mm. The work is to be carried out at above 18m height approx. for roofing sheets and side cladding around the boiler house etc. complete as all directed by Engineer-in-charge.	1,350.00	Sq.m	672.40	9,07,740.00
29	Supplying and fixing 5 mm thick Multi wall polycarbonate sheets and anadoised aluminium glazing bars together with complete accessories for North light glazing of Factory blocks including cost of all materials, labour etc. except service tax etc. complete as directed by Engineer-in-charge.	150.00	Sq.m	2,266.15	3,39,922.50
	Total Value of work			₹	37,45,537.82

Note:

1	A penalty of 0.5% of the gross value of work shall be levied for every weeks or part there of non-execution/delay in the execution of work subjected to maximum penalty of 10% of the gross value of total part executed.
2	The rates are inclusive of all taxes and duties except Service tax, which is extra as per service tax norms will be paid by BHEL to the agency after submission of necessary documents.

Note : The bidders are required to quote the tender value on percentage (%) basis at excess or less or on par with estimate value in figures and words.

Tender %	In figure	In words
Excess		
Less		
Estimated value		