



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

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-11/2012-13, Dt: 21.07.2012

PRICE BID

Item no.: 1

Name of work: Modification & renovation of closed storage area for EM shop (Silicon shed).

| S. No. | Description of the item | Qty | Unit | Rate (₹) | Amount (₹) |
|--------|---|--------|------|----------|------------|
| 1a | 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 as directed by Engineer-in-charge. | 171.00 | Cu.m | 103.40 | 17,681.40 |
| b | ----do---- up to First additional depth of 1.50 M to 3.00 M. | 162.00 | Cu.m | 122.30 | 19,812.60 |
| 2 | Earth work in excavation by mechanical means (Hydraulic Excavators) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sq.m on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposing earth to be leveled and neatly dressed for Hard Rock (Blasting prohibited) etc. complete as directed by Engineer-in-charge. | 66.00 | Cu.M | 325.25 | 21,466.50 |
| 3 | 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 as directed by Engineer-in-charge**. | 12.00 | Cu.M | 1,560.50 | 18,726.00 |
| 4 a | 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 as directed by Engineer-in-charge**. | 30.00 | Cu.M | 1,641.30 | 49,239.00 |

| S. No. | Description of the item | Qty | Unit | Rate (₹) | Amount (₹) |
|--------|--|--------|------|----------|-------------|
| 4 b | Providing and laying in position ready mix concrete manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 25 KM having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per ID: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-in-charge. M 25 grade Reinforced cement concrete by using 380 kgs of cement per cu.m of concrete. All works upto floor V level. as per IS 456: 2000 for all concrete works upto all levels etc. complete as directed by Engineer-in-charge. | 150.00 | Cu.m | 4,542.40 | 6,81,360.00 |
| 5 | Conveyance of excavated spoil up to a lead of 2 Kms, including loading, unloading and spreading etc. complete as directed by Engineer- in- charge. | 191.00 | Cu.M | 56.41 | 10,774.31 |
| 6 | Filling with available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidation each deposited layer by ramming and watering, lead upto 50.00 m and lift upto 1.50 m etc. complete as directed by Engineer-in-charge. | 142.00 | Cu.M | 45.70 | 6,489.40 |
| 7 | Centering and shuttering including strutting, propping etc.; and removal of form work, for columns, pillars, piers, abutments, machine foundations, posts and struts etc. complete as directed by Engineer-in-charge. | 410.00 | Sq.M | 180.40 | 73,964.00 |
| 8 | Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding grills with binding wire all complete by cold twisted bars etc. complete as directed by Engineer-in-charge**. | 15.00 | M.T | 4,003.00 | 60,045.00 |
| 9 | Brick work with clay flyash FPS brick of class designation 75 in super structure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 Coarse sand) etc. complete as directed by Engineer-in-charge**. | 30.00 | Cu.M | 1,808.00 | 54,240.00 |
| 10 | 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 as directed by Engineer-in-charge**. | 275.00 | Sq.m | 65.80 | 18,095.00 |
| 11 | 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 as directed by Engineer-in-charge. | 5.00 | Cu.m | 582.68 | 2,913.40 |
| 12 | Dismantling brick masonry walls for all heights, removing and clearing the debris and carting away upto to lead of 2 KM including loading, unloading and spreading segregating useful materials as directed by Engineer-in-charge including the cost of all labour scaffolding etc. complete as directed by Engineer-in-charge. | 5.00 | Cu.m | 355.88 | 1,779.40 |

| S. No. | Description of the item | Qty | Unit | Rate (₹) | Amount (₹) |
|--------|--|--------|----------|----------|-------------|
| 13 | Providing and fixing barge boards in required girth (200 mm horizontal, 200 mm vertical) with 0.50 mm color galvalume sheets upto a length of 2.50 M, fixed to steel members with self drilling / self stitching fasteners at maximum 500 mm c/c along the length of capping, flashing etc., complete as directed by Engineer-in-charge including the cost of galvalume sheets, fixtures, fittings etc. complete as directed by Engineer-in-charge. | 72.00 | One Sq.m | 800.40 | 57,628.80 |
| 14 | Supply & Installation of 0.5 mm thick colour galvalume sheet flashings hood / ridges/ triangular portion closers to require shape with self threaded screws etc. complete as directed etc. complete as directed by Engineer-in-charge. | 50.00 | Sq.M | 900.00 | 45,000.00 |
| 15a | Fabrication of structural steel work including all materials going into the process of fabrication and forming and integral form 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 rate includes cost of electrodes, gases etc., The raw structural steel sections will be issued FREE of cost at BHEL stores etc. complete as directed by Engineer-in-charge.** | 110.00 | MT | 7,563.80 | 8,32,018.00 |
| b | Erection of Steel work out lined in item No.15a above including the charges for handling, leading and stacking at site at approved locations prior to erection including all site riveting, bolting, jointing and site welding where ever required etc. complete as directed by Engineer-in-charge. | 110.00 | MT | 3,241.60 | 3,56,576.00 |
| 16 | Painting at site of all structural steel work with 2 coats of aluminium paint / synthetic enamel paint of approved shade to trusses, columns, girders, bracings etc., with aluminium paint or synthetic enamel paint as required etc., complete. The required paint only will be issued free of cost by B.H.E.L at their stores etc. complete as directed by Engineer-in-charge. | 110.00 | MT | 596.50 | 65,615.00 |
| 17 | Fabrication and fixing inserts in concrete wall with lugs of required dia welded to the insert plates. (Structural Steel, electrodes and gas required for work will be issued on free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge.** | 1.00 | MT | 3,500.00 | 3,500.00 |

| S. No. | Description of the item | Qty | Unit | Rate (₹) | Amount (₹) |
|--------|--|----------|------|-----------|--------------|
| 18 | Fixing 52 Kg rails for various gauges at floor level including fixing side guide angle etc., complete with necessary clamps required for fixing rails in position and alignment, leveling as per B.I.S 7215-1974. (M.S rails, M.S. Angles, Strl. steel will be issued free of cost by BHEL at their stores).Including cost of clamps, bolts & nuts etc. complete as directed by Engineer-in-charge.** | 6.00 | MT | 6,000.00 | 36,000.00 |
| 19 | Applying two coat of synthetic enamel paint of given shade over a coat of primer to new wood work including scraping the surfaces, cost of all labour, tools and other incidentals etc. complete as directed by Engineer-in-charge.** | 30.00 | Sq.M | 20.00 | 600.00 |
| 20 | Applying Snowcem/interior emulsion paint 2 coats to external new plastered surfaces including curing etc., over a coat of primer (only exterior paint will be issued free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge.** | 275.00 | Sq.M | 20.55 | 5,651.25 |
| 21 | Fabrication and fixing of M.S holding down bolts , threaded both sides including supply of nuts, washers etc., complete as directed. (M.S. rounds as per required size will be issued on free of cost at BHEL stores) etc. complete as directed by Engineer-in-charge.** | 0.508 | MT | 26,476.30 | 13,449.96 |
| 22 | Supply and Fixing of colour coated aluminium zinc alloy coated metallic hirib profile sheet of nominal 1015-1020mm effective cover width 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) with colour bond steel quality paint coat as per AS/NZS 2728 type 3-4.The paint shall have a total coating thickness of nominal 35 µm, Comprising of nominal 20µm exterior coat on top surface and nominal 5 µm reverse coat on back surface over nominal 5µm primer coat on both surfaces of approved colour shade by concern authority. 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. | 2,900.00 | Sq.M | 672.40 | 19,49,960.00 |
| 23 | Supplying and fixing fiber reinforced acrylic roofing sheets 3 mm thick of light blue / white shade and of approved brand to Mach AC corrugations or galvalume tracdeck sheet corrugation including the cost of all materials such as GI 'J' bolts, nuts, washers etc., and fixing at all heights of Factory block complete as directed by Engineer-in-charge. | 72.00 | Sq.m | 1,302.00 | 93,744.00 |

| S. No. | Description of the item | Qty | Unit | Rate (₹) | Amount (₹) |
|--|---|-------|------|----------|---------------------|
| 24 | Supplying and fixing plain PVC pipe of 200 mm dia of approved quality with specials, accessories and approved sealing /jointing compound on the exterior of the inserted portion of the fitting and fixing in position and joining to MS gutters, including cost of all materials, sealing compound, labour etc., for all heights etc. complete as directed by Engineer-in-charge. | 48.00 | RM | 640.17 | 30,728.16 |
| 25 | Supply and fixing glazed steel windows of approved make including supply and fixing 4 mm thick plain glass with best quality putty, MS handles and peg stays including painting with two coats of synthetic enamel paint over one coat of red oxide paint including supplying and fixing weld mesh 50 x 50 mm (8G x 8 G).The window section and fabrication shall confirm to I.S. 1038 etc. complete as directed by Engineer-in-charge. | 30.00 | Sq.m | 2,280.00 | 68,400.00 |
| Total | | | | ₹ | 45,95,457.18 |
| Add increase in Vat 1% over the material cost (70% of Above value) | | | | ₹ | 32,168.20 |
| Total value of work | | | | ₹ | 46,27,625.38 |
| Total : ₹ Forty six lakhs twenty seven thousand six hundred twenty five and thirty eight paise only | | | | | |

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| Note: **Cement, structural steel/MS reinforcement steel, M.S. Rails will be issue by BHEL on free of cost at their stores. | |
| 1 | A penalty of 0.5% of the gross value of work will be levied for every week's delay of work subject to a maximum penalty of 10% of the gross value of work. |
| 2 | Service tax, which is extra as per service tax norms will be paid by BHEL to the agency after submission of necessary documents |
| 3 | The rates are inclusive of all taxes and duties. |

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 | | |

Name of the Contractor :

Signature of the Contractor