

Issued to agency:



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

Revised Price bid

SCHEDULE- A

Tender Notice No:

PRICE BID

HY/FCD/OT-22/2009-10 , Dt: - 01.02.2010

Item no : 03

**Name of work: Construction of Extension of GT Test Bay (66m X 30m),
Annexe Building (24mX10m-FF), Control Room (66mX10m)
and GT Main Annexe Building (14m X 60m) at GT Complex.**

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|---------------------------|---|-------------|------|-----------|-------------|
| Part-I Civil Works | | | | | |
| 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. | 6556.00 | 1.00 | 103.40 | 677890.40 |
| b | ----do---- up to First additional depth of 1.50 M to 3.00 M. | 786.00 | Cu.m | 122.30 | 96127.80 |
| c | ----do---- up to second additional depth of 3.01 M to 4.50 M. | 400.00 | Cu.m | 141.20 | 56480.00 |
| d | ----do---- up to third additional depth of 4.51 M to 6.00 M. | 400.00 | Cu.m | 160.10 | 64040.00 |
| 2 | Earth work in surface excavation not exceeding 30cm in depth but exceeding 1.5 m in width as well as 10 Sq.m on plan including disposal of excavated earth upto 50 m lift upto 1.5m, disposed soil to be levelled and neatly dressed. | 840.00 | Sq.m | 20.74 | 17421.60 |
| 3 | Earth work in excavation by mechanical means (Hydraulic Excavators) / manual measn 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 levelled and neatly dressed for Hard Rock (Blasting prohibited). | 1230.00 | Cu.M | 325.25 | 400057.50 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|------|-----------|-------------|
| 4 | 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). | 1198.00 | Cu.M | 2449.00 | 2933902.00 |
| 5a | 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 and all levels with 1:1½ ,3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size). | 2560.00 | Cu.M | 3732.00 | 9553920.00 |
| 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 admixures 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 410 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.(cement cost considered in the estimate is Rs 144.00 per bag. If there is increase or decrease proportionate reimbursement/recovery cost will be done by BHEL) | 400.00 | Cu.m | 4162.80 | 1665120.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|--|-------------|----------|-----------|-------------|
| 6a | Providing and laying in position specified grade, of Reinforced cement concrete excluding the cost of centering,shuttering, finishing and reinforcement - all work up to plinth and all levels with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) - | 417.00 | cu.m | 3359.60 | 1400953.20 |
| 6b | 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 admixures 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 20 grade Reinforced cement concrete by using 320 kgs of cement per cu.m of concrete. All works upto floor V level. (cement cost considered in the estimate is Rs 144.00 per bag. If there is increase or decrease proportionate reimbursement/recovery cost will be done by BHEL) | 973.00 | One Cu.m | 3856.80 | 3752666.40 |
| 7a | Centering and shuttering including strutting, propping etc; and removal of form work, for columns, pillars,peirs,abutments,machine foundations, posts and struts. | 10318.00 | Sq.M | 180.40 | 1861367.20 |
| b | -----Do-----For Pockets . | 130.00 | Sq.M | 180.40 | 23452.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|-------|-----------|-------------|
| 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. | 285.40 | M.T | 42700.00 | 12186580.00 |
| 9a | Conveyance of excavated spoil up to a lead of 2 Kms, including loading , unloading and spreading etc. complete as directed by Engineer- in-charge. | 5458.00 | Cu.M | 56.41 | 307885.78 |
| b | ----do---- up to additional lead of 1 KM over and abone 2 KM.(63.32-56.41 = 6.91) | 5284.00 | Cu. M | 6.91 | 36512.44 |
| 10 | 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. | 2598.00 | Cu.M | 45.70 | 118728.60 |
| 11 | Coursed rubble masonry in second sort with hard stone in foundation & plinth with cement mortar 1:6 (1 cement :6 coarse sand) | 196.00 | Cu.M | 1913.10 | 374967.60 |
| 12 | Brick work with FPS bricks of class designation 75 in superstructure above plinth level up to ground floor in all shapes and sizes in cement mortar 1:6. | 488.00 | Cu.M | 2357.40 | 1150411.20 |
| 13a | 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. | 6097.50 | Sq.m | 95.10 | 579872.25 |
| b | 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) . | 4038.00 | Sq.m | 107.80 | 435296.40 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|------|-----------|-------------|
| 14a | 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. The above frames should be fixed to the concrete / masonry walls by means of self expanding screws. Approximate size of windows 1.30mx0.9m and 3.00mx2.10m -Double shutter without guard bars(grills)... Excise duty/VAT inclusive .Service tax extra as applicable. | 449.00 | Sq.m | 4046.00 | 1816654.00 |
| b | Dismantling the existing NCL Secular windows carefully along with fixtures and fittings handing over to stores as directed Engineer-in-charge. The rate quoted shall include cost of frame, hinges and fasteners. | 26.00 | Sq.M | 50.05 | 1301.30 |
| 15 | Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufactures specifications including appropriate priming coat , preparation of surface , cost of all materials etc; complete on concrete work. | 100.00 | Sq.M | 77.75 | 7775.00 |
| 16 | Granolithic topping of 25 mm thick using 1 cement 1 granite chips of 10mm down graded laid over base concrete when it is green conditions and ironite finishing 12mm thick using a mix of 50Kg of ironite , 200 Kg of cement and 0.30 Cu.m of granite metal 6mm down graded including cost of form work , curing etc. complete. | 8380.00 | Sq.m | 485.00 | 4064300.00 |
| 17 | Casting and placing in position of R.C.C cable trench covers of 75 mm thick in mix of 1:1.5:3 using 20 mm down graded metal including cutting, welding of Angle iron frame, cost of MS reinforcement as specified including cutting bending , binding wire, spreading of Ironite powder at 2 Kg / Sq.m, neat finishing ,cost of labour, etc complete as directed. (MS angles, electrodes only will be issued on free of cost by BHEL at their stores). | 367.00 | Sq.m | 333.00 | 122211.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|--|-------------|------|-----------|-------------|
| 18 | Fabrication and fixing inserts in concrete wall with lugs of required dia welded to the insert plates.(St. Steel,electrodes and gas required for work will be issued on free of cost by BHEI at their stores) | 55.00 | MT | 3500.00 | 192500.00 |
| 19a | Construction of Rectangular Manhole of inside dimensions 1.20 x 0.90 M including Earth work, bed concrete 1:2:4 – 200 mm thick, walls with C.R.S Masonry 2 nd sort in C.M (1:6) of 0.45 M width, plastering walls inside, out side with C.M (1:4) / 20 mm channeling, inside manhole neat finishing, fixing C.I Foot steps at 400 c/c. Fixing of Angle iron frame with 75 x 75 x 6 lugs welded in C.C 1:2:4 on top of wall of 8 Cms. Thick including back filling etc., complete. including casting & placing inposition of RCC cover for the manhole. (M.S. Angle, will be issued free of cost). _ Manholes upto 1.50M to 2.00M. | 12.00 | Each | 12000.00 | 144000.00 |
| b | Same as above but with internal dimensions of 0.60 x 0.90 M upto 1.00 M depth. | 4.00 | Each | 9000.00 | 36000.00 |
| 20 | Supplying , laying and jointing 80 mm nominal bore GI pipe medium grade properties and weight as per IS 1239 , ISI marked with GI fittings, including cost of pipe and its fittings, labour charges, testing, etc., complete. | 240.00 | RM | 458.15 | 109956.00 |
| 21a | 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. | 60.00 | RM | 258.20 | 15492.00 |
| b | -----do -----for 300 mm dia RCC pipe. | 120.00 | RM | 338.75 | 40650.00 |
| c | -----do -----for 450 mm dia RCC pipe. | 80.00 | RM | 499.55 | 39964.00 |
| 22a | Grouting with cement mortar 1:1 including cost of all materials, labour, curing, for all leads and lifts etc; complete.For pockets | 10.00 | Cu.m | 6016.56 | 60165.60 |
| b | -----Do-----for Pockets with Fos rock issued by BHEL on free of cost including cost of all labour, conveyence charges etc. complete. | 5.00 | Cu.m | 444.00 | 2220.00 |
| 23 | Painting with bitumen paint 80/100 grade @ 1.2 kg/sq.m. for construction joints of flooring slab. | 50.00 | Sq.m | 30.00 | 1500.00 |
| 24 | Providing STP make 12 mm thick mastic pad of 25mm depth in flooring construction joints including cost of all materials and labour | 90.00 | RM | 10.40 | 936.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|--|-------------|------|-----------|-------------|
| 25 | Supply and fixing 12 x 25 mm thick teak wood reaper in the dummy of RCC flooring. | 90.00 | RM | 14.00 | 1260.00 |
| 26 | Providing and Laying Damp-Proof Course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse Sand : 4 Graded stone aggregate 12.5 mm nominal size). | 115.00 | Sq.m | 144.15 | 16577.25 |
| 27 | Providing and fixing 10mm thick acid and alkali resisitant tiles over a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand) of approved make and colour using acid and or aikali reising mortar bedding and joints filled with acid and or alkali resisting cement as per Is:4457 complete as per the directions of Engineer-in-charge , | 12.00 | Sq.m | 873.00 | 10476.00 |
| 28 | Plastering over roof slab in CM 1:4, 20mm thick mixed with water proofing compound, Make: "Sika" @ 3% by weight of cement as per manufacturer's specification, curing as directed. Rate quoted shall include finishing, cost of all materials and labour etc., complete. (Cement = 7.69 kgs/sq.m x3% WP@ Rs 20.00 per kg = Rs 4.61) upto 10 m height. | 1785.00 | Sq.m | 115.06 | 205382.10 |
| 29 | Supplying and laying of vitrified tiles of brighter shades and marble design of Premium Quality (1st quality) in required texture, design and colour, for flooring /skirting /cladding using vitrified tiles of size 600 x 600mmx8 mm thick of approved make. It includes cost of cutting, champering of tiles to required size, with base of Conmax C - 500 tile adhesive for fixing tiles on existing mosaic/cement flooring, jointing the tiles with colour tint etc. complete as directed by Engineer-in-charge. The rate quoted shall include cost of all materials, labour, adhesives, colour tint material, leads and lifts etc. complete. Amount will be paid on the basis of measurement of the area of finished work only. It also includes surface preparation of existing ceramic floor giving necessary slopes, cleaning joints and grouting joints with pigmented additives to match shade of the tile, making pockets for electrical, communication, network cables etc. complete as directed by Engineer-in-charge. Amount will be paid on the basis of measurement for finished work only. | 1067.00 | Sq.m | 950.00 | 1013650.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|----------|-----------|-------------|
| 30 | Supply & fixing of 18 mm thick best quality approved colour and design machine cut mirror polished granite slabs in required sizes for counter wash basins, floorings, vanity counter, claddings, facias etc. including cutting, champering, rounding and mirror polishing etc. complete as directed. Cost of granite slabs shall be Rs. 1600/- per Sq. m and granite slabs of required design and colour will be selected by department. | 167.20 | sq.m | 3071.00 | 513471.20 |
| 31 | 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/mOK, 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 microperforations, back of the tile duly sanded and finished with a coat of protective paint over the formed grid and complete in all respects. Boards, where light fixtures to be fixed shall be handed over to Department. Make: Armstrong | 790.00 | Sq.m | 1130.00 | 892700.00 |
| 32 | Supply and aluminium partition with new anodised box - section of size 101.60 X 44.45 X 2 mm for verticals, Top & Horizontal and 63.50 X 38.10 X 2 mm for intermediate horizontal at spacing suiting to the site requirements as approved. Wherever doors are coming wooden runners are to be provided into box section. This includes grouting of the frame to the floor properly fixed at ends to walls, cost of aluminium section, labour etc; Complete. (The door opening shall be deducted for payment). | 220.00 | One sq.m | 1316.00 | 289520.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|----------|-----------|-------------|
| 33 | Supply & fixing 5.5 mm thick plain / ground glass to the aluminium frame with rubber beeding screwless snap on clips etc. complete | 230.00 | One sq.m | 668.00 | 153640.00 |
| 34a | Supply and fixing 9 mm thick pre-laminated particle board both side laminated exterior grade fixed to frame with rubber beeding screw less snap on clips etc., complete. | 110.00 | One sq.m | 534.00 | 58740.00 |
| b | ---- do ---- of 12 mm thick for doors with both sides laminated. | 80.00 | One sq.m | 606.00 | 48480.00 |
| 35 | Providing and fixing stainless steel tubular railings (1.2 mm thick) 0.90 M height of best quality as per design and drawings using top rail(2") , vertical pipe(1.5"), Horizontal pipe (0.63") along with 12 mm thick glass with glossy finsh etc., as directed by Engineer-incharge. | 24.00 | RM | 3300.00 | 79200.00 |
| 36 | Etching of balcony/ stair case glass panels of size 135 cm x 46 cm (53"x18") with boarder of 12 mm width around the glass and BHEL emblem as directed by the Engineer- incharge. The rate quoted shall include cost of etching of glass panels, transportation, labour etc., complete.(payment for supply and fixing of glass for 12 mm thick glass will be paid under above item) | 24.00 | sq.m | 860.00 | 20640.00 |
| 37 | Supplying and fixing of HDPE pipes with 4.0 kg/sq.cm of OD 110 mm conforming to IS 4984-1995 including transportation 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 joing including cost of all materials ,sealing compound ,labour etc., for all heights complete | 80.00 | RM | 190.60 | 15248.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|----------|-----------|-------------|
| 38 | Supply & fixing of full height aluminium door with double leaf manual slide opening mechanism at main entrance in required size made out of anodised aluminum box section of size 44.50x47.50x2 mm for verticals, top and middle rails and 101.60x44.50x2 mm for bottom rail inclusive of supply & fixing of all aluminium fixtures and fittings suitable to the door sliding mechanism, handles, suitable locking arrangement etc. complete, wherever members are joined wooden runners are to be inserted in the box section. This includes grouting of rails/aluminum sliding sections to the floor properly etc. complete as directed by Engineer-in-charge. Providing & fixing of 12 mm toughened glass with rubber beading with screwless snap on clips etc. for top portion of the door frame of approximate size 3' x 2.5' on each door leaf and 12 mm thick "Novapan" particle board, exterior grade, laminated on both sides fixed to bottom portion of the door frame of approximate size 3' x 4.5' on each door leaf with rubber beading, screwless snap on clips etc. complete. (No. of door leaf - 2 Nos. and the approximate size of the door is 1.8x2.4 m - 2 Nos. & 1.2x2.1 m - 2 Nos. | 26.00 | Sq.m | 4000.00 | 104000.00 |
| 39 | Applying two or more coats of distemper with oil bound washable distemper of approved brand and manufacture to given an even shade including preparation of the surface, cost of all labour, material and other incidentals including priming coat with cement primer. | 8937.00 | Sq.m | 41.60 | 371779.20 |
| 40 | 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). | 3197.00 | Sq.m | 29.90 | 95590.30 |
| 41 | Supply and fixing of aluminum window grills of size 1.50 Mx1.80M approx and 1.20 mx1.80M approx . along with aluminium frame consisting aluminium 'F' (solid) 0.80kg/12' supply and fixing of design of 4" aperture aluminium grill to the above frame work with necessary fixtures. It includes fixing of total frame to the existing brick work, finishing etc complete. (The material shall be aluminium alloy :6063, thick 7 mm, ultimate tensile strength more than 19 kgs/sq.mm) | 699.00 | One Sq.m | 1540.00 | 1076460.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|----------|-----------|-------------|
| 42 | Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture) 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 12mm thick bed of cement mortar 1:3 (1cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 Kg per Sq.m including poniting in white cement mixed with pigment of matching shade complete. | 350.00 | One Sq.m | 556.60 | 194810.00 |
| 43 | Supply,providing and fixing of Hollow metal Steel door single/double door of size 1.50mx2.10m at all levels from ISO 9001-2000 certified Manufacturer.Fully flush type of 46 mm thick Pressed Galvanized:Door frame shall be single rebate profile of size 143 x 57 mm with bending radius of 1.6 mm having 1.60 mm thick galvanized steel sheet. Steel door shutter of 46 mm thick, fully flush, double skin door shall be manufactured from 1.2 mm thick galvanized steel sheet. The infill material shall be resin bonded honey comb Kraft paper. Door frames and shutter shall be finished with Epoxy (35 microns DFT) of approved colour. Stainless steel double ball bearing butt hinges of size 101 x 89 x 3 mm thick,Panic latch Briton 378E with Mortise lock (ML 100P),half cylinder & ss D handle 254mm with rose (Briton 379E) with DDS Box Keeper. Concealed flush bolts for fixing on inactive shutter 300mm length of Ryobi make,Door closer Ryobi 8803std arm make,Single glazed Clear Vision Panel of size 200 x 300 mm having 5mm thick. Glass to be fixed with clip on frame having no visible screws and oil adhesive tape, including cost of all materials etc., as directed by the Engineer incharge. | 41.00 | Sq.m | 6799.85 | 278793.85 |
| 44 | Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a priming coat of approved steel primer with M.S. tube. | 6.00 | M.T | 60150.00 | 360900.00 |
| 45 | Flooring in 25mm thick using 1 cement and 3 parts of granite stone chips of 3 to 10mm gauge (no sand) ellis pattern first sort including neat finishing , curing,cost of materials etc; complete. | 1072.00 | Sq.m | 196.00 | 210112.00 |
| 46 | Supplying and fixing plain PVC pipe of 100 mm dia of 6 kg's/cm² 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 joing to MS gutters , including cost of all materials ,sealing compound ,labour etc., for all heights complete | 76.00 | RM | 200.36 | 15227.36 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|----------------------|------|--------------------|-------------|
| 47 | Teak Wood door with first class teak wood panelled shutter 35mm thick including supply and fixing aluminium lower bolts 300mm long - 4m, martic lock and latch 1 Nos ,125mm aluminium handles 2 no.s , twin rubber stopper 2 no.s etc. complete. | 3.60 | Sq.m | 2503.00 | 9010.80 |
| 48 | Supply and fixing of teak wood door frame with 6mmof MS hold fast 50 X 6X 150 mm long as pointed with bitumen paint the sides of the frame coming into contact with masonry etc; complete. | 0.08 | Cu.m | 52090.00 | 4167.20 |
| 49 | Polishing two or more coats on new wood work with French spirt polish including a coat of wood filler as directed by Engineer-in-charge. Including cost of all mateirals. | 8.10 | Sq.m | 75.60 | 612.36 |
| 50 | Supplying and fixing plain PVC pipe of 75mm dia (as per IS 4kg/sq.m) 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 joing to MS gutters , including cost of all materials ,sealing compound ,labour etc., for all heights complete | 60.00 | RM | 80.78 | 4846.80 |
| | | Total Part- I | | 50394571.69 | |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|--|-------------|------|-----------|-------------|
| | Part - II Sanitary items | | | | |
| 1 | Supply and fixing of new urinary pans, "Parry ware" make, ceramic, Model (Cat 0575)- "New Magnum Urinal" (600 mm x 400 mm) along with all accessories, C.P spreader brackets etc., regular in colour along with partition for Magnum Urinal ceramic, 'Z' type brackets to be screwed to the wall at the bottom, in regular colour etc., complete. | 13.00 | Each | 3933.00 | 51129.00 |
| 2 | Supply and fixing with "Parry ware" make Cascade series wash hand basin of size 550 mm x 450 mm oval shape with counter top with centre tap hole, regular in colour with all accessories like brackets, screws etc., complete . | 12.00 | Each | 2024.00 | 24288.00 |
| 3 | Supply and fixing of new "Parry ware" make Elite - European water closet of size 530 mm x 400 mm, with "P/S" trap including PVC Slimline Dual flush tank (Cistern) of size 475 mm x 318 mm (Code No. C8109), EWC standard seat cover (Cat C8071) with all accessories like Parryware flush kit suitable to the above flush tank, brackets, screws, connecting pipe from flush tank to EWC, PVC Connections etc. complete. Colour: Silky Off - White. | 6.00 | Each | 2000.00 | 12000.00 |
| 4 | 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. | 12.00 | Each | 3000.00 | 36000.00 |
| 5 | Supply & fixing of 6 mm thick mirror of approved quality "Modi float/Saintgobin glass", with 6 mm thick hard board back and with best quality teak wood frame (design beading) all round the mirror including necessary clamps, polishing to the beading, cost of all materials etc. complete. | 8.30 | Sq.m | 1445.00 | 11993.50 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|--|-------------|------|-----------|-------------|
| 6 | Providing and fixing shutters along with frames for toilets that are 30 mm thick factory made PVC rigid foam paneled, door and shutters manufactured by M/s. Rajashri made from M.S. tube, 19 gauge thick, size 19x19mm for styles and 15x15mm for top and bottom rails, covered with heat moulded PVC "C" channel of 5mm thick sheet and 30x50mm wide for styles and 5mm thick and 75mm wide PVC sheets for top rail and bottom rail either side and 5 mm thick, 20mm wide cross PVC sheet as gap insert for top rail and bottom rail, paneling of 5mm thick PVC sheet fitted with M.S. frame welded / sealed to the styles and rails with 5x30mm PVC sheet beading on either side and joined together with solvent cement adhesive etc. complete in all respects as per direction of engineer in-charge fixed to frames. This includes providing brass hinges, brass aldrops, brass tower bolts, brass handles and brass door stoppers (For W.C. and bathroom doors) | 44.40 | Sq.m | 1830.00 | 81252.00 |
| 7 | Supply and fixing in position medium teak wood door frame along with single leaf shutters solid core non - decorative type 30 mm thick of approved quality and brand including 3 No.s MS hinges 10 cm long and 1 no. mortise lock (Godrej make) , using scantling of size 100 mm X 75 mm (including with MS holdfasts of size 230 X 50 X 4 mm - 6 No.s and painting with coal tar to the faces coming in contact with masonry / concrete . including cost of all materials , labour etc. complete as directed by Engineer - in - charge. | 6.00 | Sq.M | 3180.00 | 19080.00 |
| 8 | Supply & fixing "Jaquar" make urinal flushing valves for urinal pots in all accessories/Cat: 1077. | 23.00 | Each | 1320.00 | 30360.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|------|-----------|-------------|
| 9 | Supply & fixing "Marc" make oyster series brass bib cocks. With all accessories / Cat: MOY 1030. | 27.00 | Each | 506.00 | 13662.00 |
| 10 | Supply & fixing "Marc" make oyster series brass pillar cocks. (Cat: MOY 1010) with all accessories etc. | 27.00 | Each | 519.00 | 14013.00 |
| 11 | Supply & fixing "Marc" make oyster series brass stop cocks. (Cat: MOY 1040) with all accessories. | 45.00 | Each | 698.00 | 31410.00 |
| 12 | Thorough cleaning of existing oil bound distemper paint/white washing with water by scrapers or any other suitable tools and applying one coat of oil based cement primer and applying 3 coats altek lappam one coat after drying the previous coat and sand papering and applying one coat of oil bound cement primer etc., complete as directed by the Engineer-in-charge. (Only OBD Paint will be supplied by BHEL) | 100.00 | Sq.m | 84.10 | 8410.00 |
| 13 | Finishing walls with Premium Acrylic smooth exterior paint with silicon additives of required shade on new work (Two are more coat applied @ 1.43 ltr/ 10 Sq.m over and including base coat of water proofing cement paint applied @ 2.20 Kg/10 Sq.m) | 150.00 | Sq.m | 60.10 | 9015.00 |
| 14 | 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. | 80.00 | Sq.m | 28.50 | 2280.00 |
| 15 | Supply & fixing in position PVC Pipes of 3" dia(as per IS 6kg/sq.m) of best quality for drainage lines / urinal / hand wash areas including chasing the brick wall, concrete etc and making good the same after fixing the same etc. complete. | 220.00 | RM | 108.70 | 23914.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|-------|--|-------------|------|-----------|-------------|
| 16 | Supplying and fixing CI Nahany traps 1st quality ISI marked conforming to IS: 1729 - 1979 with C.P Grating fixing with white cement as per site requirements with standard practice - 100mm inlet - 75 mm dia (3") outlet pipe - 4 Kgs. | 20.00 | Each | 200.00 | 4000.00 |
| 17a | Supply & fixing 15 mm dia Nominal Bore GI pipe medium Grade properties and weight as per IS 1239 ISI mark with GI fittings including the cost of GI pipe & its fittings, chasing brick work/concrete and making good the same ,cost of labour , all materials etc. complete. | 200.00 | RM | 131.00 | 26200.00 |
| (b) | .. Do... 20mm dia (3/4") | 172.00 | RM | 146.00 | 25112.00 |
| (c) | .. Do... 25mm dia (1") | 172.00 | RM | 191.00 | 32852.00 |
| 18(a) | Supply & fixing of Gunmetal Gate (GM peet) valve as per IS -778 class-I, Indian make heavy type 15 mm (1/2") dia NB size. | 37.00 | Each | 242.00 | 8954.00 |
| b | .. Do .. 20mm dia (3/4") | 27.00 | Each | 327.00 | 8829.00 |
| c |do ...25mm dia (1") | 20.00 | Each | 482.00 | 9640.00 |
| d. |do ...80mm dia (3") | 2.00 | each | 1369.25 | 2738.50 |
| 19 | Supplying ,laying ,jointing and testing 101.60 mm (4") SWG pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in Cement mortar 1:5:1 prop. including excavation of trenches and socket pits in anysoil(except rock requiring blasting) up to 914.40 mm(3'.0") depth and refilling with watering and tamping. | 160.00 | RM | 149.00 | 23840.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|--------------------------|------|------------------|-------------|
| 20 | Supplying ,laying ,jointing and testing 152.4 mm (6") SWG pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in Cement mortar 1:5:1 prop. including excavation of trenches and socket pits in anysoil(except rock requiring blasting) up to 1524 mm(5'.0") depth and refilling with watering and tamping. | 120.00 | RM | 254.00 | 30480.00 |
| 21 | Construction of brick masonry chamber of dimension 0.914 x 0.457 x 0.914 m (3' x 1'6" x 3') with brick in CM 1:6 including plastering over both sides with CM 1:4, 20 mm thick and fitted with light weight CI frame and cover of size 0.914 x 0.457 m in CM 1:4 including bed concrete of CC 1:4:8 as required, supplying and fixing one CI steps in brick masonry if necessary if necessary including earth work excavation in all soils, refilling around the chamber removing the surplus earth etc. complete as directed.CI frame and cover of 40 kgs. | 8.00 | Each | 3226.00 | 25808.00 |
| 22 | Construction of brick masonry chamber of size 23 x 30 Cm (9" x 12") in brick work in CM 1:6 and plastering in CM 1:4, 20 mm for gully trap 150 mmx100mm including cost of excavation, PCC 1:4:8, 75 mm thick, all materials, labour etc., complete. | 12.00 | Each | 321.00 | 3852.00 |
| 23 | Providing and placing on terrace (at all floor levels) of polyethylene water storage tank of 1000 ltrs capacity with double layer approved brand and manufacture as per ISI with cover and suitable locking arrangement and making necessary holes for inlet and outlet and overflow pipes with fittings (ballcock, inlet and outlet nipples) without base support for tank. (Brick work will be paid seperately). | 5.00 | Each | 6000.00 | 30000.00 |
| 24 | Dismantling brick masonry walls for all heights, removing and clearing the debries 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. | 60.00 | Cu.m | 355.88 | 21352.80 |
| 25 | Dismantling reinforced cement concrete / plain cement concrete and disposing of debries upto to a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete. | 30.00 | Cu.m | 582.68 | 17480.40 |
| | | Total of Part -II | | 639945.20 | |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|--|-------------|------|-----------|-------------|
| | Part-III Structural Steel Works | | | | |
| 1a | 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, gases only will be issued by BHEL on FREE of cost at their stores | 507.00 | MT | 7563.80 | 3834846.60 |
| b | Erection of Steel work out lined in item No.1 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. | 507.00 | MT | 3241.60 | 1643491.20 |
| 2 | 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. | 507.00 | MT | 596.50 | 302425.50 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|----------|-----------|-------------|
| 3 a | Supplying and fixing of Tracdek Hi-rib single skin galvalume sheets of 0.5 mm thick. One Meter width and length upto 12 M with Factory cut and fixing to the roof shall be crest fixed to roof purlins with number 12-14 x 55 mm long polymer coated galvanized hex-head self drilling screws with integral washers and EPDM imported seals (4 fasteners per support) for sheet etc., complete as directed. (Including cost of galvalume sheets). - for roofing bare galvalume. Inclusive of Excise duty and VAT.(Service tax extra as applicable will be paid by BHEL on submission of valid documents). | 2200.00 | Sq.m | 545.90 | 1200980.00 |
| 3 b | .. Do.. Cladding - Coloured | 4000.00 | Sq.m | 672.40 | 2689600.00 |
| 4 | 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. | 20.00 | Sq.M | 900.00 | 18000.00 |
| 5 | Supply and fixing North Light curves in required girth with 0.5 mm color galvalume sheets upto a length of 2.5 M having curved width upto 600 mm fixing to the steel members with self drilling / self stitching, fasteners at a maximum of 500 mm c/c along the length of capping, flashing etc., complete as directed by Engineer-in-charge including the cost of galvalume sheets, labour etc., complete. | 200.00 | Sq.M | 720.00 | 144000.00 |
| 6 | Providing and fixing 2 mm thick polycarbonate sheets and anodised aluminium glazing bars together with accessories complete for North light glazing including cost of all materials, labour etc., complete. | 600.00 | Sq.m | 2266.15 | 1359690.00 |
| 7 | Supplying and fixing fiber reinforced acrylic roofing sheets 3 mm thick of light blue / white shade and of approved brand to match 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. | 95.00 | One Sq.m | 1302.00 | 123690.00 |
| 8 | 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. | 71.00 | One Sq.m | 800.40 | 56828.40 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|---|-------------|------|-----------|-------------|
| 9 | Fabrication and fixing in position MS rain water gutter made out of 2.5 mm to 3.15 mm thick MS sheet including one coat of Red-oxide to relevant IS specifications, riveting or welding the joints, making joints water tight and providing spouts wherever required and painting with two coats of aluminium paint etc., complete all as per drawing. MS sheet of 2.5 mm to 3.15 mm thick will be issued free of cost by B.H.E.L at their stores. | 200.00 | RM | 464.00 | 92800.00 |
| 10 | 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 joing to MS gutters , including cost of all materials ,sealing compound ,labour etc., for all heights complete | 270.00 | RM | 640.17 | 172845.90 |
| 11 | Supply and fixing of Electrically operated rolling shutters conforming to as per IS 6248 , Shutter curtain made out of Aluminum Double Wall with 60 mm, OD " C " class Pipe, side Guide 150x2.5 mm thick Top Bracket 6 mm thick, MS Plate and Aluminum Bottom Rail 3.0 mm thick and Angle support 40x40x5 mm thick Angle End to End, Hood Cover 1.00 mm thick, Electrical Gear Operated System with 1 No of Reduxion Gear Box, 1 No Cromption Induction Motor 3 Phase(capacity of the Motor shall be suitable to the size of the doors as mentioned below) with Limit Switch and Reversible Switch make of Bharat Cutter with necessary electrcal cabling required for operation of shutter.One coat of Red Oxide paint except shutter curtain. The rolling shutter shall be provided with proper locking arrangement and shall be as per IS 6248. The rate quoted shall include cost of all materials, labour and scaffolding etc complete as directed by Engineer.The measurement will be made on finished item of the work for payment.(The shutter curtain is made out of Aluminium and all the other items are made out of MS and the approximatesize of the door is 5x6 M) | 150.00 | Sq.M | 8100.60 | 1215090.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|------|--|-------------|------|-----------|-------------|
| 12 | 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) | 6.00 | MT | 26476.30 | 158857.80 |
| 13 | Dismantling steel work in built up sections in angles tees, flats and channels including all gusset plates, bolts, cutting rivets, welding etc., including dismembering and stacking within 50 metres lead. | 25.00 | MT | 890.11 | 22252.75 |
| 14a | Fixing CR120 to 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., | 31.00 | MT | 6000.00 | 186000.00 |
| b | ---same as above at crane girder level--- | 14.00 | MT | 10805.40 | 151275.60 |
| 15 | Dismantaling of Galvalume sheet roofing including ridges,hips valleys and gutters etc; and stacking the material within 50 metres lead . | 660.00 | Sq.m | 24.70 | 16302.00 |
| 16 | Dismantaling steel windows including chowkhats,architrave , holdfasts etc;complete and handing over the same to the BHEL stores as directed by Engineer-in-charge. | 26.00 | Sq.m | 75.35 | 1959.10 |
| 17 | Dismantling of GI pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/mechanical means including stacking of pipes within 50metres lead as directed by Engineer-in-charge. -Above 40mm nominal bore. | 30.00 | RM | 29.05 | 871.50 |
| 18 | Demolishing cement concrete 1:4:8 manually/mechanical means, including disposal of material within 50mtrs lead as directed by Engineer-in-charge. | 70.00 | Cu m | 226.90 | 15883.00 |

| S No | Description of the item | Approx. Qty | Unit | Rate (Rs) | Amount (Rs) |
|---|---|------------------------|--------------------|-----------|--------------------|
| 19 | Supplying and fixing of various sizes of MS bolts,nuts and washers conforming to IS 1367-1961 including cost of all materials, labour etc., complete (MR) | 3.00 | One MT | 49833.00 | 149499.00 |
| | | Total Part -III | 13557188.35 | | |
| Total Part - I + Part -II + Part -III | | | | | 64591705.24 |
| Total : Rs. Six Crores forty five Lakhs ninety one thousand seven hundred and five only. | | | | | |

Service Tax:- The Service tax as applicable is extra which will be paid by BHEL to the agency after submission of necessary valid documents by the agency.

Note : The Tenders are required to quote the tender value on percentage (%) basis at excess or less or on as per estimate value

| Tender % | In figure | In words |
|---------------------|-----------|----------|
| Excess | | |
| Less | | |
| Estimated Rate only | | |

- 1 The Soil Investigation tests are to be carried out by the Contractor if required as per site condition.The agency should bear the above expenditure.
- 2 The contractor has to submit duty paying documents of the items mentioning consignee as BHEL mentioning their procurement value irrespective of their quoted/agreed value especially for Galvaume sheets, Polycarbonate sheets, NCL windows and AI rolling shutters, otherwise proportionate amount to be recovered.
- 3 The Ready mix concrete(RMC) rate has been worked out based on the present market rate Rs 144.00 per bag. Any increase /decrease in the Cement rate the same shall be reimbursed/recovered by BHEL.

Name of the Contractor :

Signature of the Contractor

Accounts Representative

Opening officer