



**BHARAT HEAVY ELECTRICALS LIMITED**  
**ELECTRO PORCELAINS DIVISION**  
BANGALORE : 560 012

**TENDER DOCUMENT**  
**(PART-B)**  
(Price Bid Format)

Associated Civil works required for relocating Assembly and Solidcore Bay

DEPARTMENT : WORKS ENGINEERING  
SECTION : CIVIL

Schedule - A

Name of the Work: Associated Civil Works required for relocating Assembly and Solid Core Bay.

<u>SL. No.</u>	<u>Item</u>	<u>Unit</u>	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
1.00	Dismantling existing structures comprising of masonry, concrete, wood work. Steel work (minor) including T & P and scaffolding wherever required, sorting the dismantled materials, disposal of unservicable materials safely to the bins identified by Engineer-in-charge inside the factory premises and stacking the servicable materials with all leads upto 1000m and lift 1.5m etc complete.	cum	423.62		
2.00	Dismantling of existing steel structures by cutting into such shape and sizes that it can be reused, stacking it properly at the identified locations inside the factory premises and disposing unusable materials to the metal scrap bin including the cost of gas cutting, welding, scaffolding etc and including cost of all materials, labour, HOM of machinery etc complete.	MT	10.00		
3.00	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil working depth upto 7m including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 1000m after breaking the clods etc complete.	cum	1405.89		
4.00	Filling available earth (excluding rock) in sides of foundation upto plinth in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with lead upto 1000m and lift upto 1.5m including cost of all labour etc complete.	cum	264.29		
5.00	Providing and filling red earth brought from outside and compacting, ramming after settling the soil with water including the cost of transportation, all materials, labour etc complete.	cum	911.05		
6.00	Providing and filling in foundation soling with granite broken metal 100mm and downsize, with approved sand including hand packing, ramming, watering includnig cost of all materials and labour with all lead and lift etc complete.	cum	92.36		
7.00	Providing and laying in position plain cement concrete 1:4:8 using 40mm and downsize graded granite metal coarse aggregate, machine mixed, concrete laid in layers not exceeding 15cms thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing etc complete. Excluding the cost of cement, the required cement will be supplied by BHEL at free of cost.	cum	91.17		
8.00	Providing and constructing granite size stone masonry in superstructure and substructure with cement mortar 1:6, edges of stones chistle dressed in course not less than 15cms high, bond stones at every 2m apart in each course including cost of materials, labour, scaffolding, curing etc complete. Excluding the cost of cement, the required cement will be supplied by BHEL at free of cost.	cum	241.68		

9.00	Providing and laying in position plain cement concrete of mix M20 (1:1.5:3) using 20mm and downsize graded granite metal, machine mixed, concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation, plinth and cills, including the cost of all materials, labour, HOM of machinery, curing etc complete. Excluding the cost of cement, the required cement will be supplied by BHEL at free of cost.	cum	482.37		
10.00	Providing and constructing burnt brick masonry with approved quality class designated 50 with cement mortar 1:4 for basement and superstructure including cost of materials, labour charges, scaffolding, curing etc complete. The sample of brick should be certified by Engineer-in-charge before construction work. Excluding the cost of cement, the required cement will be supplied by BHEL at free of cost.	cum	142.7		
11.00	Providing and laying in position reinforced cement concrete (RCC) of design mix M20 (1:1.5:3) using 20mm and downsize graded granite metal, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation, plinth and ground floor level for slabs, staircases, lintels, retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing etc complete. Excluding the cost of cement, the required cement will be supplied by BHEL at free of cost.	cum	505.23		
12.00	Labour charges for providing TMT steel reinforcement for RCC work including straightening, cutting, bending, hooking, placing in position, lapping and/ or welding wherever required, tying with binding wire and anchoring to the adjoining members, wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery etc complete. The design of reinforcement should be certified by Engineer-in-charge before commencement of bar binding work. The required steel reinforcement will be supplied by BHEL at free of cost. Supply of binding wire also will come under the scope of contractor.	MT	76.00		
13.00	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness above 200mm including cost of all materials, labour etc complete.	sqm	800.00		
14.00	Providing and constructing precast hollow concrete blocks 40cm X 20cm X 20cm in superstructure with cement mortar 1:6, including the cost of materials, labour, scaffolding, curing etc complete. Excluding the cost of cement, the required cement will be supplied by BHEL at free of cost.	sqm	112.00		

15.00	Providing 20mm thick cement plaster in single coat with cement mortar 1:4, to stone masonry and concrete surface including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding including cost of all materials, labour, curing etc complete. Excluding the cost of cement, the required cement will be supplied by BHEL at free of cost.	sqm	7211.80		
16.00	Labour charges for laying Vitrified tiles of approved make, shade and size of flooring, treads of steps and landings laid on a bed of 12mm thick, using Roak cement or cement mortar 1:3 mix, flush pointing with white cement using colour pigment, including cost of materials, labours, curing etc complete. The required tiles and cement will be supplied by BHEL at free of cost. The supply of Roak Cement will be under the scope of the contractor.	sqm	674.50		
17.00	Providing and laying vertically and horizontally prepolished water cut 40mm thick granite laid on existing horizontal or vertical supports using Cement mortar 1:3 proportion. Including the cost of cutting to required shape, pattern with paper joints, including full rounding off for nosing finishing with cement mortar, making through jointing with sealant, making holes and cuts as per design including curing etc complete. Excluding the cost of cement, the required cement will be supplied by BHEL for free of cost.	sqm	167.48		
18.00	Providing and fixing to wall ceiling and floor 25mm diameter GI pipe of B class and of make TATA, Suryaprakash, Appolo or Jindal including cutting, threading and also making grooves in the wall, including providing necessary fittings. Fixing to wall, ceiling, floor, trenches etc complete.	RMT	100.00		
19.00	Providing and fixing to wall, ceiling and floor (including trenches), low density polyethylene pipes 6.00kgf/ sqcm of dia 75mm to 140mm, make Oriplast, Aashirwaad or Prince, fixing with special flange, compression type fittings, joint sealants, wall clips, making grooves in the wall, ceiling and floor, including cost of all material, labour charges etc complete.	RMT	100.00		
20.00	Providing and fixing 1mm thick MS sheet sliding/ hinged shutter with frame and diagonal braces of 40mm X 40mm X 6mm angle iron, 3.15mm thick MS Gusset plates at junctions and corners, with handles, stoppers and locking arrangements etc. including applying a priming coat of red oxide paint including the cost of materials, labour HOM of machinery etc complete.	sqm	25.80		

21.00	Providing and fixing in position in CC 1:3:6 steel glazed windows and ventilators side hung/ top hung fully openable as per approved drawings using Z angles of 25x33x3mm, weighing 1.419kg/m both for outer and inner frames and central mullion section of size 25x46x3mm duly providing T section 19x19x3mm for glazing of windows not more than 34cm c/c including providing and fixing 4mm thick reeded glass with teakwood beading of required size, 4 nos. of holdfasts of approved size, section should be cut to length welded and electrically grinded subdividing frames unit shall be tenoned and revitted into the frames electrically. All the steel surface should be thoroughly cleaned free from rust and painted with one coat of anti-corrosive paint and finishing with two coats of ready mix paint of approved colour ASIAN make including the cost of all materials, fixtures and labour etc complete.	sqm	22.68		
22.00	Providing and fixing white vitreous china clay (Make: Parryware, CERA, ROCA, Hindware, TOTO, Kohler) Indian water closet (Orrisa pan) S or P trap including fixing flushing cistern with all fittings, CI/ MS brackets, flush pipe, fittings and clamps, stop cock, angle cock, overflow arrangements, couplings, nahn trap, painting of fittings and brackets, cutting and making grooves on the wall/ floor/ ceiling wherever required, etc complete.	each	10.00		
23.00	Providing and fixing white vitreous china clay (Make: Parryware, CERA, ROCA, Hindware, TOTO, Kohler) European water closet S or P trap including fixing flushing cistern with all fittings, CI/ MS brackets, flush pipe, fittings and clamps, stop cock, angle cock, overflow arrangements, couplings, nahn trap, painting of fittings and brackets, cutting and making grooves on the wall/ floor/ ceiling wherever required, etc complete.	each	5.00		
24.00	Providing and fixing white vitreous china clay flat back urinal basin of size 580X380X350 (big size) with 5 litres of pvc sutomatic flushing cistern. CI/ MS bracket, standar dflush pipe and CP brass spreaders with brass unions and GI clamps d trap with outlet grating and other couplings in CP brass, painting of fittings and brackets, cutting and making grooves in the wall and floor wherever required including the cost of all materials and labour etc complete. Makes: Parryware, CERA, ROCA, Hindware, TOTO, Kohler only.	each	10.00		
25.00	Providing and fixing white vitreous china clay, flat back (Make: Parryware, CERA, ROCA, Hindware, TOTO, Kohler) wash basin size 630 X 450mm with a pair of 15mm CP brass pillar taps with CI/ MS brackets, waste coupling, waste pipe, connecting pipe, cutting and making grooves in the wall and floor wherever required, including cost of materials, labour etc complete.	each	5.00		
26.00	Providing and fixing in position CP brass bib cock of (Neta, Leader, Jaquar, Kohinoor, Viking make) and quality 15mm nominal bore including cost of all materials, labour and HOM of equipments with all leads etc complete.	each	20.00		

27.00	Providing and fixing in position brass stop cock of (Neta, Leader, Laquar, Kohinoor, Viking make) and quality 15mm nominal bore including cost of all materials, labour and HOM of equipments with all leads etc complete.	each	20.00		
28.00	Labour charges for fabricating of truss column, purlins, fencing members/gates/doors etc as shown in drawing which will be issued during execution, with available new steel or by collecting from released structural members by welding/ gas cutting and applying two coats of enamel paint over a coat of red oxide primer including necessary scaffolding, tools and plants up to working height of 9.00 mtrs, detailed fabrication drawings to be submitted by contractor before commencement of work	MT	20.00		
29.00	Providing and installing of pre painted Galvalume iron Trapezoidal profiles sheet of approved make 1060mm width (1000mm cover width), 28-30mm crest height with crest distance of 200mm c/c with two ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet should be 0.47mm +/- 0.02mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/ A755-550 mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 20-22 microns using self drilling/ self tapping screws of 25mm length, to be fixed over the existing purlins, rafters, channels and trusses etc complete.	sqm	625.00		
30.00	Providing and installing of approved make pre painted Galvalume iron Accessories, like plain, ridges, plain gutter, plain flashing, corner Trim, etc. The total coated thickness (TCT) of the sheet shall be 0.47mm +/- 0.02 tolerance mm ZincOAlu Alloy coating AZ 150gsm as per ASTM 1397/ 755-550mpa steel grade, 5-7 microns epoxy primer on both sides of the sheet and polyester top coat 20-22 microns using self drilling/ self tapping screws of 25mm length. (width upto 500-600 mm or as per requirement) to be fixed over the existing purlins, rafters, channels and trusses.	sqm	100.00		
				<b>Sub Total =</b>	
<b>Taxes, if any (i)</b>					
<b>(ii)</b>					
<b>(iii)</b>					
				<b>Grand Total =</b>	

(Rupees \_\_\_\_\_)

- Note: (i) Rate quoted must be in actual figures and not in the percentage form. Quotation having rates in percentage formats will be rejected.  
(ii) Bidders are advised to meet the Engineer Incharge, visit the work spots and understand the scope of work clearly before quoting.  
(iii) Taxes and duties as applicable may be quoted saperately in the space provided. Otherwise the rate quoted above will be considered as inclusive of all taxes and no further clarification in this regard will be entertained later.  
**(iii) Please note that only the required Cement, Steel (structural and reinforcement) and Vitrified tiles will be provided by BHEL.**

Signature of the Bidder = \_\_\_\_\_

Name of the Bidder = \_\_\_\_\_

Address of the Bidder = \_\_\_\_\_

Contact No. of the Bidder = \_\_\_\_\_

E-mail of the Bidder = \_\_\_\_\_