

**TENDER DOCUMENT**

*FOR*

**CIVIL AND ELECTRICAL WORKS AT RECREATION CLUB  
OF PEROORKADA FACTORY, HLL**

**PART-III  
PRICE BID**

**TENDER NO. HLL/ID/13/23**

**MARCH- 2013**

**HLL LIFECARE LIMITED.  
INFRASTRUCTURE DEVELOPMENT DIVISION**

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## **1. COMMERCIAL CONDITIONS**

- 1.2.1. The tendered rate shall inter alia be deemed to include for the provision of all materials, process, operation and special requirements detailed in the particular specification irrespective of whether these are mentioned in the description of equipment schedule and Bill of quantities or not. It is an express condition of the contract that the tendered rates for various items in the Bill of Quantities shall be deemed to include for the full, entire and final condition of the contractor respective items of the works in accordance with the provision of the contract.
- 1.2.2. The tendered rate shall include for all taxes, duties, etc. as applicable and shall be quoted on the works contract basis for the **CIVIL AND ELECTRICAL WORKS AT RECREATION CLUB OF PEROORKADA FACTORY, HLL.**
- 1.2.3. The tendered rate shall remain firm and free from variation due to rise in the cost of materials/equipment labour or any other reasons whatsoever during the contract period and valid extension on the case may be.
- 1.2.4. The quantum of excise duty included in the tendered price, the rate at which they were assumed etc. shall be indicated in the tender.

### **1.1 UNIT RATES**

- 1.1.1 Only approved work will be measured on completion and priced as per rates quoted against the respective items.

### **1.2 BRIEF DESCRIPTION OF PRICING**

- 1.2.1. The tenderer shall furnish duly certified break up of material and labour separately for each item of work.
- 1.2.2. Unforeseen difficulties for which provision has not been made in the tender will in no way relieve the successful tenderer from the full execution of the work.
- 1.2.3 The price quoted shall be the final amount for this finished work.

### **1.3 PRO-RATA VALUE**

The detailed break up of prices for various items of materials if any should be provided by successful tenderers within fifteen days from the date of letter of intent to facilitate the employer for assessment and verification and to certify payment.

#### **1.4 INCOME TAX**

Any payment to the contractor as per contract will be made after deducting income tax as per the rules and regulations.

#### **1.5 SALES TAX AND EXCISE DUTY**

The tenderer shall clearly indicate sales tax, Excise and other duties as applicable in his offer for carrying out this work.

#### **1.6. SUBMISSION OF BILL**

1.6.1. The contractor shall from time to time prepare and submit interim bills of the work executed and on completion of the contract, he shall prepare and submit the final bill. The measurements sheets in support of the interim and final bills shall be prepared by the contractor on the basis of measurements taken by him jointly with the project engineer and the said measurement sheets shall be submitted by him with the relevant bill.

#### **1.7. EXTRA ITEMS**

The contractor is bound to carry out any items of work necessary for the completion of the job even though such items may not have been included in the schedule of probable quantities or rates, such items being necessary or essential for completing the job. Variation order in respect of such additional items and their quantities will be issued in writing by the employer.

1.7.1 All shavings, cuttings and other rubbish as it accumulates from time to time during the progress of work and on completion including that of the sub-contractors and special tradesman and all materials condemned by the project engineer shall be cleared and removed from the site by the contractor without any extra charge.

1.7.2 All measuring steel tapes, scaffolding, ladders instruments and tools that may be required for taking measurements shall be supplied by the contractor.

#### **1.8. OVER TIME WORK**

If the contractor is required to work night or on holidays in order to maintain the time schedule he shall take prior approval from the Engineer-in-charge. He should also provide and maintain at his own cost sufficient lights as may be necessary to enable the work to proceed satisfactorily during the night.

- 1.8.1. The contractor shall give full facilities to all other contractors working on site. He shall also arrange his programme of work so as not hinder the progress of other trades. The decision of the Engineer-in-charge on any point of dispute between the various parties shall be final and binding.
- 1.8.2. It is specifically pointed out that the contractor shall not be entitled to any compensation whatsoever on account of delay in procurement or supply of controlled materials and the rates quoted in the contract are fixed till the completion of the contract.
- 1.8.3. The contractor shall co-operate with other agencies appointed by the owners for the work to proceed smoothly with the least possible delay and to the satisfaction of the owners, architects and the consultants.
- 1.8.4. The owners shall provide a source for power supply at one convenient point at site. The contractor shall at his own cost install a separate meter at the said source and lay additional cables from the said source also at his own cost. For the electricity consumed by the contractor he shall pay the owner the actual cost at the rate charged by the local authority for power for constructional purposes. The contractor shall also obtain the necessary permit for utilizing power for constructional purposes.

## **1.9. TERMS OF PAYMENT**

- 1.9.1 The rate of payment for the contract value under this contract shall be as per the certified running account bills as per the clause 7 of GCC.

The Security deposit will be deducted at the rate of 5% from the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. It will be released after defect liability period from the date of actual completion. However this will be released against submission of Bank Guarantee for equivalent amount with a validity period of one year.

## **2 SPECIAL CONDITIONS**

### **2.1. EXECUTION WORK**

2.1.1. The whole of the work as described in the contract (including bills of materials, specification and all drawings pertaining thereto) and as advised by the Engineer-in-charge from time is to be carried out and completed in all parts to the entire satisfaction of the Employer. Any minor details of construction which are obviously and fairly intended, or which may not have been definitely referred to in this contract, but which are usual construction practice and essential to the work, shall be included in this contract.

### **2.2 GUARANTEE/ DEFECTS LIABILITY PERIOD**

2.2.1 The contractor shall without any extra cost carry out for a period of 12 months after the work is taken over by the owners, the maintenance and attend to any difficulties.

2.2.2 The contractor shall associate with him the Employer staff during guarantee period/ defects liability period of 12 months.

### **2.3. CERTIFICATE OF COMPLETION**

2.3.1 The contractor shall intimate to the Engineer-in-charge in writing as and when the works are completed and put into beneficial use in order to enable the consultants to check certify to the owners to take over the plants.

2.3.2 The work shall not be considered as completed and put into beneficial use until the consultants have certified in writing that the same has been completed and put into beneficial use.

2.3.3 The defects liability period shall commence from date of such completion or any specific date mentioned therein.

## **BILL OF QUANTITIES**

**Civil and Electrical works at Recreation Club of Peroorkada Factory, Trivandrum**

**PART A – CIVIL WORKS**

<b>SI No</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate (Rs) in figures &amp; words</b>	<b>Amount(Rs) in figures &amp; words</b>
1	Demolishing cement concrete in floor manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	Cum	22		
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Cum	22		
3	Providing and laying IPS flooring (sub-floor to the wooden flooring) with cement concrete 1:2:4 ( 1 cement:2 coarse sand:4 course aggregate) using 6mm coarse aggregate average 5cm thick and providing 2mx2m bays and providing 3mm thick aluminium strips to the full depth of 40mm and cement finish with 1:3 ,12 mm thick plastering and obtained the full depth 5.2cm, including watering, curing and coveyance of all materials and labour charges etc. complete.	Sqm	210.4		



4	<p>Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc.</p>				
	<p>Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.</p>				

	12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595 mm, made of Gypsum plasterboard, manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16mm thick fire retardant PVC film on the face side and 12micron metalized polyester on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit.	Sqm	277.3		
5	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg., for doors, including cost of cutting floors , embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
	With stainless steel cover plate minimum 1.25 mm thickness.	Each	3		
6	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm) with necessary accessories and screws etc. complete.	Each	3		
7	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
	Cement mortar 1:4 (1 cement :4 coarse sand)	Sqm	7.37		

8	12 mm cement plaster of mix :1:4 (1 cement: 4 fine sand)	Sqm	12.8		
10	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work.	Sqm	12.8		
11	Centering and shuttering including strutting, propping etc. and removal of form for :Lintels, beams, plinth beams, girders, bressumers and cantilevers.	Sqm	0.83		
12	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).	Cum	0.05		
13	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars.	Kg	4.99		
14	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately)				

a	:For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	6.6		
b	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately).Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	7.22		
15	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete :				
	150x10 mm	Each	1		
16	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Each	1		
17	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.Pre-laminated particle board with decorative lamination on both sides.	Sqm	0.88		

18	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness	Sqm	0.88		
<b>TOTAL (PART - A)</b>					

**Civil and Electrical works of Recreation Club at Perookada Factory, Trivandrum**

**PART B - Electrical Works**

<b>SI No.</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate (Rs) in figures &amp; words</b>	<b>Amount (Rs) in figures &amp; words</b>
<b>A. Wiring</b>					
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
a	Group B	Point	10		
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required				
a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	m	80		
b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	m	100		
c	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	m	50		
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit				

	as required.				
a	20 mm	m	200		
b	25 mm	m	100		
4	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.				
a	150 mm X 150 mm X 60 mm deep	Nos	5		
b	200 mm X 150 mm X 60 mm deep	Nos	5		
5	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Nos	10		
6	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.				
a	1 or 2 Module (75mmX75mm)	Nos	5		
7	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).	Nos	5		

8	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	Nos	5		
9	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling, wall, false ceiling including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Nos	45		
10	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required.	Nos	15		
11	Supplying and fixing extra down rod of 10 cm length G.I. pipe ,15 mm dia, heavy gauge including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Nos	20		
12	Supplying and installing following size of perforated pre-painted M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
a	100 mm width X 50 mm depth X 1.6 mm thickness	m	100		



b	150 mm width X 50 mm depth X 1.6 mm thickness	m	150		
13	Supplying and installing following size of perforated pre-painted M.S. cable trays bends with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
a	100 mm width X 50 mm depth X 1.6 mm thickness	Nos	5		
b	150 mm width X 50 mm depth X 1.6 mm thickness	Nos	3		
14	Supplying and installing following size of perforated pre-painted M.S. cable trays Tee's with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
a	100 mm width X 50 mm depth X 1.6 mm thickness	Nos	5		
b	150 mm width X 50 mm depth X 1.6 mm thickness	Nos	3		
15	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	4		

16	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/termination with GI thimble etc. as required.	m	20		
17	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	m	40		
18	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	m	250		
19	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	m	250		
20	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
a	Upto 35 sq. mm	m	25		
c	Above 95 sq. mm and upto 185 sq. mm	m	440		
21	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.				

a	Upto 35 sq. mm	m	12.5		
b	Above 95 sq. mm and upto 185 sq. mm	m	28		
22	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
a	Upto 35 sq. mm (clamped with 1mm thick saddle)	m	12.5		
b	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	m	55		
23	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				
a	Upto 35 sq. mm (clamped with 1mm thick saddle)	m	200		
b	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	m	28		
24	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	Nos	10		
25	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed /				

	XLPE aluminium conductor cable of 1.1 KV grade as required.				
a	3.5C x 120 sqmm (45mm)	Nos	2		
b	4C x 25 sqmm (28mm)	Nos	4		
c	4C x 16 sqmm (28mm)	Nos	10		
26	Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc as required				
a	50 mm dia	m	50		
b	100 mm dia	m	20		
c	150 mm dia	m	20		
27	Supply, Installation, Testing & Commissioning of AC panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system with busbars extendable on both sides, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering				

	instruments and accessories as per specification.				
	<b>Incomer</b>				
	160A FP 16kA MCCB with thermal magnetic release with adjustable OL, SC and EF protection - 1 no.				
	<b>Busbar</b>				
	1 Set of 200 A TPN busbars of high conductivity electrolytic quality Aluminium alloy.				
	1 Set of 25 x 3 mm copper busbars of high conductivity electrolytic quality shall be provided throught out the panel for its earthing.				
	<b>Instruments</b>				
	2A, C curve SP MCB - 3 nos.				
	RYB indication lamp, LED type - 3 nos.				
	(0-500)V voltmeter, Acc. class 1 with 90 deg defl. scale - 1 no with voltage selector switch.				
	1 No 3 phase Digital Multi function meter to read V, A, F Acc class 1.				
	160/5A 10VA class 1 resin cast CT - 1 set				
	3 phase 4 wire CT operated, (5-10) A electronic type energy meter, Acc. Class 1 - 1 no.				
	<b>Outgoing.</b>				
	63A TPN C curve MCB - 2 nos.				
	40A TPN C curve MCB - 6 nos.	Nos	1		
28	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date.				

b	3.5C x 120 sqmm	m	550		
f	4C x 25 sqmm	m	100		
g	4C x 16 sqmm	m	150		
29	Supplying and fixing following rating, four pole, 415 volts, isolator in weather proof, IP54, 2mm thick CRCA sheet powder coated enclosure complete with connections, testing and commissioning etc. as required.				
a	40 amps	Nos	5		
b	63 amps	Nos	2		
30	Dismantling of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and lamps etc. from ceiling, wall, false ceiling including dis-connection of 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Nos	45		
31	Dismantling of ceiling fan, including disconnecting wiring, down rods and all accessories etc. as required.	Nos	15		
32	Dismantling of exhaust fan of size upto 450mm sweep in the existing opening, including dis-connection of 1.5 sq. mm FR PVC insulated, copper conductor, single core cable, earthing, louvers and all accessories etc. as required.	Nos	5		

33	Supply & laying ISI marked following electrical grade chequered type rubber mat.				
a	2m x 1m x 6 mm for 415V grade	Nos	5		
34	Supply and installation of ABC Dry Chemical powder type 5 Kg capacity each made of high pressure steel cylinder wall mounting type with hook plate and anchor fastening, ISI marked, complete with wheel type valve internal discharge tube 1 M long high pressure wire braided discharge hose discharge horn, having a jet length of 8m with discharge time of 10 sec fully charged with ABC powder, including all accessories conforming to IS 2171.	Set	8		
	<b>TOTAL (PART - B)</b>				
	<b>GRAND TOTAL (PART A + PART B)</b>				

