

DETAILED ESTIMATE FOR
PROPOSED CFC SHED
AT GARMURH, MAJULI

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ABSTRACT OF COST

Sl. No.	Description	Amount
1	Total Cost of Civil works	
2	Total Cost of Sanitary works	
3	Total Cost of water supply works	
4	Total Cost of internal electrification	
	Total	

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NAME OF PROJECT:**Detailed Estimate for "PROPOSED CFC SHED AT GARMURH, MAJULI"**

SL. NO.	CPWD SOR NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (in Rs./unit)	Amount (Rs.)
1		EARTHWORK				
1.1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
	2.6.1	(a)All kind of soil	Cum	42.78		
2		PLAIN CEMENT CONCRETE WORKS				
2.01	4.1	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately).				
	4.1.5	(a). In prop. 1:3: 6 (1 cement:3 coarse sand : 6 coarse agg. by volume (using mixture machine)	Cum	2.03		
3		REINFORCED CEMENT CONCRETE WORKS				
	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
3.01	4.1.2	1:1½:3 (1 Cement: 1½ coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	Cum	18.03		

3.02	4.2	Providing and laying cement concrete in 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 sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing :	Cum	45.41		
	4.2.2	1:1½:3 (1 cement : 1½ coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).				
4		ANTI-TERMITE TREATMENT				
	26.1.1	Pre construction anti-termite treatment with aqueous emulsion having concentration 1:19 with chlorpirophose solution (trichel or equivalent) and water. This provides emulsion containing 1% chlorpirophose solution (by weight)- at the bottom of foundation pits and walls on either side up to a height of 300mm from bottom of the excavation made for column, plinth beam, wall, trenches etc. by applying the emulsion @ 5 liters per square meter of the surface area before starting construction work (supplying of necessary tools and accessories by the contractor) as per the direction of the Department complete.				
4.01		b) with aqueous emulsion having concentration 1:499 with Premise 350 SC (imidachlopid 30.5% SC) and water i.e.0.07% solution	sqm	28.22		
5		SHUTTERING				
	5.9	Centering and shuttering including strutting, propping etc. and removal of form for all heights :				
	5.9.1	Foundation, footings, base of columns, pile cap, raft and mass concrete works etc.	sqm	11.04		
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	70.56		

	5.9.6	Columns, pillars, piers, abutments, posts and struts.	sqm	101.02		
	5.9.5	5) Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	86.04875		
	5.9.3	3) Suspended floor, roofs, landing, balconies and access platform	sqm	160.11		
	5.9.70	Stairs, (excluding landings) except spiral-staircases	sqm	14.67		
6		BRICKWORK				
6.01	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
	6.1.1	Cement mortar 1:4 (1cement: 4coarse sand).	CUM	3.14		
6.02	6.13	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.				
	6.13.1	Cement mortar 1:3 (1 cement :3 coarse sand)	Sq.m	93.92		
7		PLASTERING				
7.01	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix : 13.2.1 1:4 (1 cement: 4 fine sand)	Sq.m	107.62		
8.02	13.1	12 mm cement plaster of mix : 13.1.1 1:4 (1 cement: 4 fine sand)	Sq.m	132.19		
8.03	5.22.A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. 5.22A.6 Thermo-mechanically treated bars.	kg	9859.00		
9		Floor finish				

9.01	4.1.	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 (zone-III) : 6 graded stone aggregate 20 mm nominal size).	cum.	5.12		
9.02	13.7	12 mm cement plaster finished with a floating coat of neat cement of mix : 13.7.2 1:4 (1 cement: 4 fine sand)	Sq.m.	7.59		
10		PAINTING				
10.01	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sq.m	239.82		
10.02	13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : 13.43.1 Water thinnable cement primer.	Sq.m	239.82		
10.03	13.60	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :				
		13.61.1 Two coates on new work	Sq.m	239.82		
10.04	13.85	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.13.85.1 With ready mixed pink or grey primer on wood work(hard and soft	Sq.m	11.98		
10.05	13.62	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : 13.62.1 Two or more coats on new work over an under coat of suitable shade	Sq.m	11.98		
11		DOORS/ WINDOWS & FITTING				

11.01	9.20	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
		9.20.1 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sq.m	4.10		
11.02	9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately). 9.1.2 Sal wood	cum	0.10		
11.03	21.3	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):				
		21.3.2 With float glass panes of 5.50 mm thickness	sq.m.	40.52		
12		RAILLING & grill				
12.01	10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
		10.25.2. In gratings, frames, gurd bar. Ladder, ralling, brackets, gates and similar works.	KG	415.77		
13		DOORS/ WINDOWS & FITTING				
13.01	9	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				

	9.74.1	b) Tower bolts i) 250mm x 10mm	NO	4.00		
	9.81	Providing and fixing bright finished brass handles with screws etc. complete:				
	9.81.1	125 mm	NO	4.00		
14		TRUSS				
14.01	10.16	Steel work in built up tubular trusses including cutting hoisting fixing in position and applying a priming coat of approved steel primer , welded and bolted including special shaped washers etc. complete. 10.16.2 Hot finished seamless type tubes	Qtl	14.74		
15		ROOF				
15.01	12.1	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required. 12.1.3 0.63 mm thick with zinc coating not less than 275 gm/ m ²	sq.m	195.25		
15.02	12.4	Providing ridges or hips of width 60 cm overall width plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete. 12.1.3 0.63 mm thick	rm	36.74		
16		CEILLING				

	12.31	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level, over first class kail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately): 12.31.1 Flat surfaces	sq.m	111.39		
17	21.3	Partition a) 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. 21.3.3. With float glass panes of 8 mm thickness	sq.m	8.10		
TOTAL						

SANITARY WORKS

Sl.No.	CPWD for ref.	Description of Items.	Unit	Rate	Qty.	Amount.
1		Pipe				
	17.35	Providing and fixing soil, waste and vent pipe				
		17.35.1. 100 mm dia				
		17.35.1.2 Centrifugally cast	metre		8.00	
		17.35.1. 75 mm dia				
		17.35.2.2 Centrifugally cast	metre		8.00	
	17.36	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2.				
		17.36.1 100 mm dia pipe	Each		8.00	
		17.36.2 75 mm dia pipe	Each		8.00	
	17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts, nuts				

		complete				
		17.38.1 100 mm dia pipe				
		17.38.1.2 Sand cast Iron S&S as per IS-3989	Each		8.00	
		17.38.2 100 mm dia pipe				
		17.38.2.2 Sand cast Iron S&S as per IS-3989	Each		8.00	
2		COWEL				
		Providing fitting and fixing 100mm dia PVC cowel of ISI make complete as direction and specified.	Each		1.00	
3	17.3	EUROPEAN TYPE WATER CLOSET				
	17.3.1	Providing and fixing white vitrious china pedestal type water closet(European type) with seat and lid, 10 ltr low level whitw vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof cupling of approved municipal design complete, including painting of fittings and brackets, cyuuing and making good the walla and floors whwrevwr required.				
		17.3.1 W.C. pan	each		1.00	
4		WASH BASIN				
	17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings.				
		17.25.6 Surgeon type wash basin of size 660x460 mm	each		1.00	
5		MIRROR				
	17.32	Providing fixing mirror of superior glass and required shape and size .				
		17.32.4 Rectangular shape	each		1.00	
6		SOAP TRAY,SOAP DISH,LIQUID SOAP DISPENSER AND LIQUID SOAP CONTAINER				

	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 high and 112 mm distance from wall of standard shape with braket of the same materials with snap fittings of approved quality and colour weighing not less than 105 gms				
			each		2.00	
7		TOWEL RAIL				
	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.				
		17.73.2 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	each		1.00	
8		BOTTLE TRAP				
	17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
		17.70.2 Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms	each		2.00	
					Total Rs. =	

Water Supply works

Sl.No.	CPWD for ref.	Description of Items.	Unit	Rate	Qty.	Amount.
		C.P.V.C. PIPES				
1	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and				
		Internal work -Concealed on wall				
		18.7.1 15 mm nominal outer dia Pipes	rm		8.00	
		18.7.2 20 mm nominal outer dia Pipes	rm		8.00	
		18.7.3 25 mm nominal outer dia Pipes	rm		8.00	
		18.7.4 32 mm nominal outer dia Pipes	rm		8.00	
2	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.				
		18.9.9 100 mm dia			6.00	
		18.9.9 150 mm dia			6.00	
		VALVE				
3	18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
	18.19.4	50 mm nominal bore				
		18.19.4.1 Horizontal	each		1.00	
	18.19.5	65mm nominal bore				
		18.19.4.1 Horizontal	each		1.00	
	18.19.6	80 mm nominal bore				
		18.19.6.1 Horizontal	each		1.00	
4	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931.				
		18.49.1. 15 mm nominal bore	each		1.00	
5	18.50	Providing and fixing C.P. brass long bib cock of approved quality conforming to IS standard and weighing not less than 810gms.				
		18.50.1. 15 mm nominal bore	each		1.00	
6	15.52	Providing and fixing C.P. brass stop cock of standard design and of approved quality conforming				

		to IS:8931				
		18.52.1. 15 mm nominal bore	each		2.00	
					Total Rs. =	

ELECTRIFICATION WORKS

CPWD SOR NO. 2016	ITEM DESCRIPTION	UNIT	RATE	QNTY	AMOUNT
1.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
1.1.1	Group A	Point		35	
1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
1.14.6	2 X 16 sq. mm + 1 X 6 sq. mm earth wire	Metre.		155	
1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
1.17.11	2 x 2.5 sq. mm	Metre.		110	

1.17.20	2 x 4 sq. mm	Metre.		110	
1.22	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.				
1.22.2	100 mm X 100 mm X 60 mm deep	Each		6	
1.22.3	150 mm X 75 mm X 60 mm deep	Each		6	
1.22.4	150 mm X 150 mm X 60 mm deep	Each		10	
1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
1.27.1	1 module	Each		6	
1.27.1	2 module	Each		6	
1.27.2	3 module	Each		10	
1.31	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 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	Each		6	
1.32	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 A & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each		10	
1.42	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 Nos. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each		8	
1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
1.24.1	5/6 A switch	Each		5	

1.24.3	15/16 A switch	Each		5	
1.24.4	3 pin 5/6 A socket outlet	Each		5	
2.1	Providing and fixing following capacity TP&N disconnecter fuse switch unit inside the existing panel board with ISI marked HRC fuses including drilling holes in cubicle panel, making connections, etc. as required.				
	315 A, TP&N	Each		1	
24.10	Supplying including fitting and fixing of the following CFL lamp Twister/Tornado/Mbianle/ Essential/Genie etc. complete as directed and specified by the deptt. (Philips or equivalent)				
	Essential HPF 23 W WW E-27-220-240 V ICT/12	Each		10	
6.8	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required	Metre		120	
6.7	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required.	Metre		130	
1.50	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
1.50.1	Upto 450 mm sweep	Each		1.00	
		Each		1.00	
1.25	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each		6.00	

	Supplying including fitting fixing of following star rated A.C. Ceiling fan complete with all accessories like down rod, canopy etc. of following sweeps with making necessary connection cable, as approved by the Deptt.s etc. as required complete and as directed by the Department [Without regulator]. (ORIENT PSPO make / Usha make/ CROMPTON make/ Havells/ ATC/ V GAURD make)				
	Energy efficient 5-star 54" sweep. ORIENT PSPO / Usha / CROMPTON / Havells/ ATC or equivalent make	Each		6.00	
	TOTAL AMOUNT				