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Office- The National Central Co- Operative Bank Ltd., Bettiah

समेकित सहकारी विकास परियोजना, पश्चिम चम्पारण, बेतिया

B.O.Q

Name of work- Detailed Estimate For constuction and Furnishing of Training hall with Latest Training Gazettes, Necessary furnishing, counter, fixtures furnitures etc for office of The Central Co- Operative Bank Ltd, Bettiah (west champaran) under Samekit Sakhari vikas pariyojna, paschim champaran, Bettiah

BILL OF QUANTITY						
ESTIMATED COST -		RS - 7500000=00				
BILL OF QUANTITY AMOUNT -RS -			No. OF ITEMS INCLUDED IN TENDER			
COST OF B.O.Q-			RS-		TIME OF COMPLITION AS PER NIT	
EARNEST MONEY -			RS-		BID PROCESSING FEE	
S.No	SOR No.	Items of work	Quantity	Unit	Rate	Amount
1	5.3+5.33B.4	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15, landings, balconiec, shelves, chajjas, lintels, bands, plain window sills, staircasees and spiral staircases upto floor five level excluding the cost of centring, shuttering, finishing & reinforcement - all work upto plinth level.	64.22	cum	5719.70	367314.89
2	5.2	Reinforced cement concrete work in wall (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts, etc. upt floor five level excluding cost of centring,				
	5.2.2	1:1.5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20mm nominal size)	10.64	cum	5670.00	60331.96
3	6.1A	Brick work with bricks of class designation 100A in foundation and plinth in:				
	6.1.12A+6.3A	Cement mortar 1:4(1 cement:4 coarse sand) Extra for brick work in superstructure above floor V level for each four	91.23	cum	5890.10 5360.10	537327.21 534616.92
4	13.24	6 mm cement plasterin ceiling of mix				
	13.24.02	1:4(1 cement:4 coarse sand)	225.01	sqm	125.60	28260.93
5	13.11	12mm cement plaster of mix:				
	13.11.4	1:4(1 cement:6 coarse sand)	638.42	sqm	141.50	90337.09
6	4.1.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) excluding the cost of nosing of steps etc. complete.	11.52	cum	3998.10	46051.91
7	11.36	Providing and laying ceramic glazed wall tiles in different sizes (thickness to be specified by the manufactrurer) With water absorption less than 0.08% and in all colours mortar mix with 1:4 and all complete job.	38.92	sqm	795.00	30943.68
8	11.40	Providing and laying ceramic glazed floor tiles in 300x300 mm sizes (thickness to be specified by the manufactrurer) 1st quality With water absorption less than 0.08% and in all colours mortar mix with 1:4 and all	14.68	sqm	1414.00	20752.68
9	11.56.1	Providing and laying polished Granite stone flooring in required design and patterns, in linear as well as curilinear portions of the building all complete as per architectural drawings withj 18 mm thick stone slab over 20 mm thick base	239.14	sqm	3605.20	862142.51
10	6.3.2	Providing edge moulding to 18 mm thick Marble / Granite stone including machine polished to edge to give high gloss finish etc. complete as per design	1.61	sqm	260.10	419.39

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11	9.1.1	Providing wood work in frames of doors, windows, wrought and fixed in position with hold fast lugs or with dash fasteners of required dia (Length							
			1.23	cum	#####	120536.60	148112.67		148112.67
12	9.9.1	Providing & fixing glazed shutters for doors & windows etc using 4 mm thick float glass panes including ISI marked M.S pressed butt hinges bright finished of required size with necessary screws.	18.22	sqm	3813.30		69461.60		
13	9.48.1	Providing and fixing M.S. grills of requirement pattern in frames of windows etc. with M.S. flats square or round bars etc all complete fixed to steel	279.00	kg	144.50		40315.50		
14	12.52	Grading roof for water treatment with cement concrete 1:2:4 .. All complete job.	5.53	sqm	3932.20		21744.49		
15	10.36	Providing & fixing stainless steel (Grade 304) railing made of hollow tubes ,channels ,plastic etc, including welding grinding ,buffering , polishing and , making curvature ...with all fittings etc all complete job.	570.00	kg	546.80		311676.00		
16	10.5	Providing and fixing 1mm thick steel doors, windows with frame of 40x40x6mm angle iron and 3mm MS gusset plate at junction and corner of approved make complete including applying a priming coat of approved steel primer.	2.28	sqm	3653.00		8317.70		
17	12.60.2	Providing & fixing False ceiling with 12 mm thick plain / or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087 finished with a coat of aluminium primer on both sides with all fittings .all complete job.	113.67	sqm	670.90		76259.82		
18	12.60.3	Extra for providing 3 mm thick translucent white acrylic plastic sheets of approved quality in false ceiling instead of 12 mm thick plain / or with design particle board ceiling tiles in item above.	113.67	sqm	528.50		60073.50		
		qnty vide item no ()							
19	12.61.2	Providing 10 mm thick plaster of paris (Gypsum anhydrous) ceiling upto a height of 5 m above floor level over first class nail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (curved surface)	113.67	sqm	946.20		107552.60		
20	5.22.7	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete.(taking average rate of steel)- 6mm,8mm, 10mm,12mm , 16 mm & 20 mm	7930.80	kg	91.70		727254.22		
21	13.40A	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface the surface even and smooth complete.	863.43	sqm	127.90		110432.97		
22	13.45.1	Finishing walls with textured exterior paint of required shade : new work (two or more coats applied @ 3.28ltr/ 10sqm) over and including priming coat of exterior primer applied @ 2.20 kg / 10 sqm.	963.43	sqm	215.20		207330.59		
23	13.81.3 + 13.94.1	Painting with ready mixed synthetic enamel paint of approved brand and manufacture in all shades to give an even shade. New steel work (two or more coats	74.93	sqm	151.10		11321.55		
24	10.17	Providing and fixing M.S.fan clamp type 1 of 16 mm dia.M.S. bar bent to shape with hooked ends in R.C.C slabs during laying including painting the exposed portion of loop,all as per standard design complete	14.00	each	174.60		2444.40		
25	5.9	Centring and shuttering including strutting, propping etc. and removal of form for lintel, beams, plinth beams, girders, bressumers and contilevers.	247.77		437.50		108397.52		
	5.9.3		276.60	sqm	404.70		111940.40		
	5.9.5		196.08	sqm	494.40		96940.77		
	5.9.6								

26		Carriage of materials				
		a.Bricks	45065	nos	1179.73	53164.92
		b.Coarse Sand	79.465	cum	3723.30	295871.63
		c.Stone chips	73.882	cum	2969.31	219379.30
		d.Local sand	0.000	cum	310.65	0.00
		e.Cement	47.983	MT	480.08	23035.94
		f. steel	7.931	MT	480.08	3807.43
27		Add cost for				0.00
		Inauguration board / shilanyas Board				0.00
			RS			4858717.74
28		Extra cost for materias as per Muzaffarpur zone				
		Bricks	45065.39	thosand	362.60	16340.71
		Cement	959.67	bag	11.69	11218.52
			RS			-4886276.97
			RS			0
29		Add extra cost for New GST increase 12% to 18 % (Rate as analysis of BCD 1-1-22)BCD Letter no- 5751(14) - 18-07-2023 (taking multiplying factor 5.36% for over all estimate)				
			RS	1.0536		5150593.85
			RS			-5148181.417
			RS			-5148181.42
30		Add cost for SF @ 10% of basic rate of materias				
		a.Bricks	45065.39	nos	512.80	23109.53
		b.Coarse Sand	79.46	cum	17.58	1396.99
		c.Stone chips				
		20mm	51.72	cum	59.54	3079.26
		10mm	22.16	cum	65.79	1458.21
		d.Local sand	0.00	cum	14.19	0.00
	1239	e. Granite	239.14	sqm	100.00	23913.86
31		FOR Inuagrations / shillapatt board)- providing & fixing 18 mm thick gang saw cut , mirror polished granite over 20 mm thick cm (1:4) with complete job.(2'x2'6"=5 sft or 0.465 sqm	0.465	sqm	4242.90	1972.95
32	8.2.2.1	Lettering with painting of approved brand colour and manufacture 320 letter x 3.5 cm each = 1120 cm	1120.00	per letter	2.70	3024.00
	13.103					
			RS			-5206136.23
			RS		A	-5206100
						5203551
		WATER SUPPLY WORKS				
1	18.07	Providing and fixing Chlorinated Polyvinyl Chloride(CPVC) pipes,having thermal stability for hot & cold water supply,				
	18.7.1	15mm nominal outer dia pipe	25	Metre	172.00	4300
	18.7.2	20mm nominal outer dia pipe	15	Metre	233.20	3498
	18.7.3	25mm nominal outer dia pipe	15	Metre	317.30	4759.5
	18.7.4	32mm nominal outer dia pipe	10	Metre	395.20	3952
	18.7.5	40mm nominal outer dia pipe	0	Metre	570.00	0
2	18.8	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.				
	18.8.1	15mm nominal outer dia Pipes	15	Metre	278.00	4170
	18.8.2	20mm nominal outer dia Pipes	10	Metre	350.80	3508
3	18.16	Providing and fixing brass stop cock of approved quality (screwed end).				
	18.16.1	15mm nominal bore	5	Each	303.80	1519
	18.16.2	20mm nominal bore	5	Each	328.00	1640
4	18.17	Providing and fixing brass gate valve with C.I. wheel of approved quality (screwed end).				
	18.17.1	25mm nominal bore	1	Each	532.30	532.3
	18.17.2	32mm nominal bore	1	Each	589.90	589.9

	18.17.3	40mm nominal bore	0	Each	752.10	0
5	18.19	Providing and fixing gun metal non-return valve of approved quality (screwed end)				
		32mm nominal bore				
	18.19.2.1	Horizontal	2	Each	677.60	1355.2
6	18.21	Providing and fixing uplasticised PVC connection pipe with brass ions				
		45 cm length				
	18.21.2.1	15 mm nominal bore	4	Each	85.20	340.8
7	18.22	Providing and fixing C.P. brass shower rose 15 or 20 mm inlet				
	18.22.2	150 mm diameter	0	Each	202.10	0
8	18.49.1	Providing and fixing C.P. brass, bib cock of approved quality conforming to IS : 8931	5	Each	434.20	2171
9	18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
	18.50.1	15 mm nominal bore	2	Each	715.10	1430.20
					751.10	1502.2
10	18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
	18.51.1	15 mm nominal bore	2	Each	708.40	1416.8
11	18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved mark conforming to IS: 8931				
	18.52.1	15mm nominal bore	4	Each	594.80	2379.2
12	18.53	Providing and fixing C.P. brass angle valve for basin mixer and gysar points of approved quality conforming to IS: 8931				
	18.53.1	15mm nominal bore	5	Each	500.40	2502
13	18.65	Providing and fixing PTMT Soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	0	Each	0.00	0
14	18.76	Cutting holes up to 30 x 30 cm in walls including making good the same:				
	18.76.1	With common burnt clay F.P.S. (non modular) bricks	5	Each	198.50	992.5
15	18.77	Cutting holes up to 15 x 15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	4	Each	217.10	868.4
16	18.79	Making holes up to 20 x 20 cm and embedding pipes upto 150 mm in diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	4	Each	115.70	462.8
17	18.48	Providing & placing on terrace polyethylene water storage tank with all complete job.	2000	litre	9.70	19400
						61859.6
		Add extra cost for New GST increase 12% to 18 % (Rate as analysis of BCD 1-1-22)BCD Letter no- 5751(4) - 18-07-2023 (taking multiplying factor 5.36% for over all estimate)	%		1.0536	65175.27456
		Sub total (Water Supply works) : Rs.			B	65175.27456
17	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
	17.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	3	Each	2369.90	7109.7

61787.60

65099.41

18	17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings	3	Each	1500.00	4500
19	17.28	Providing and fixing P.V.C waste pipe for sink or wash basin including P.V.C waste fittings complete.				
	17.28.2.2	Flexible pipe 40 mm dia	3	Each	104.40	313.2
20	17.31	Providing and fixing 600 x 450 mm bevelled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	2	Each	1068.50	2137
21	17.33	Providing and fixing 600 x 120 x 5 mm glass shelf with edges rounded off supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc. complete	2	Each	713.30	1426.6
22	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.				
	17.73.2	600 mm long towel rail with total length of 645 mm, width 78 mm an effective height of 88 mm, weighthan 190 gms	2	Each	424.00	848
23	12.78	Providing and fixing on wall face unplasticised PVC (working pressure 4 kg per sqcm) rain water pipes conforming to IS:4985 including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion.				
	12.78.2	110mm diameter	50	Metre	257.50	12875
24	12.79	Providing and fixing on wall face unplasticised PVC moulded fittings / accessories for unplasticised-PVC rain water pipes conforming to IS:4985 including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion.				
	12.79.2.2	Single pushfit Coupler: 110mm	10	Each	374.60	3746
	12.79.3.2	Single tee with door 110x110x110mm	8	Each	193.40	1547.2
	12.79.4.2	Single tee without door 110x110x110mm	4	Each	190.70	762.8
	12.79.5.2	Bend 110mm bend	12	Each	132.00	1584
	12.79.6.2	Shoe plain 110mm Shoe	12	Each	115.95	1391.4
25	12.80	Providing and fixing unplasticised-PVC pipe clip of approved design to unplasticised PVC rain water pipe by means of 50x50x50mm hard wood plugs, screwed with M.S screws or required length including cutting brick work and fixing on cement mortar (1:4) 1 cement:4 coarse sand and making good the wall etc. complete.				
	12.80.2	110mm	20	Each	182.72	3654.4
26	12.81	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diametre and weighing not less than 440 grams.	4	Each	47.90	191.6
27	17.1	Providing and fixing water closet squatting pan (Indian type W.C pan) with 100mm sand cast iron P or S trap, 10 litre low level white P.V.C flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required.				
	17.1.1	White Vitreous china Orissa Pattern W.C pan of size 580x440mm with integral type foot rests.	2	Each	4470.90	8941.8
28	17.2	Providing and fixing white vitreous china pedastal type water closet (European type W.C pan) with seat and lid, 10 litre low level white P.V.C flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required.				

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17.2.1	W.C pan with ISI marked white solid plastic seat and lid.	2	Each	4230.00	8460
29 17.10	Providing and fixing Salem Stainless Steel A ISI 304 (18/8) kitchen sink as per I.S 13983 with C.I brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making good the walls wherever required.				
	Kitchen sink with drain board				
17.10.1.1	510x1040 mm bowl depth 250 mm	1	Each	5231.50	5231.5
30 17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality colour and make, weighing not less than 105gms.	5	Each	146.30	731.5
31 17.5.	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern,with fittings, standard size C.P. brass lush pipe,spreaders with unionsand clamps (all in C.P. brass) with waste fitting as per IS :2556, C.I.trap with outlet grating and other couplings in C.P. brass, includingpainting of fittings and cutting and making good the walls and floors wherever required :				
17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	4	Each	6469.00	25876
32 17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200mm wide with a minimum distances of 37mm fromwall face with concealed fittings arrangement of approved quality, colour and make weighing not less than 90 gms.	0	Each	217.70	0
					91327.7
	BCD 1-1-22)BCD Letter no- 5751(4) - 18-07-2023 (taking multiplying factor 5.36% for over all estimate)	%		1.0536	96222.86472
	Sub total (SANITARY INSTALLATION) : Rs.			C	96223
	SEWARAGE & DRAINAGE				
33 19.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete.				
19.1.2	150 mm diameter	10	Metre	464.3	4643
34 19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design.				
19.2.2	150mm diameter S.W. pipe	5	Metre	494.4	2472
35 19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
19.4.3.1	180x150 mm size P type				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	Each	1994.1	1994.1

36	19.30.1	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design				
	19.30.1.0	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	Each	4266.8	8533.6
		Sub total (SEWARAGE & DRAINAGE) : Rs.				17642.7
		Add extra cost for New GST increase 12% to 18 % (Rate as analysis of BCD 1-1-22)BCD Letter no- 5751(14) - 18-07-2023 (taking multiplying factor 5.36% for over all estimate)	%		1.0536	18588.34872
			TOTAL		D	18588.34872
A		TUBEWELL & SUBMERSIBLE PUMP				
37	24.1	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 Metre depth below ground level.				
	24.1.1	All types of soil.				
	24.1.1.3	400 mm dia.	80	Metre	681.5	54520
38	24.2	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, beyond 90 Metre & upto 150 Metre depth below ground level.				
	24.2.1	All types of soil.				
	24.2.1.3	400 mm dia.	60	Metre	896.5	53790
39	24.8	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.	6	Cum	1343.2	8059.2
40	24.1	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/ plain ended casing pipes of required dia, conforming to IS: 4270, of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge.				
	24.10.3	200 mm nominal size dia having minimum wall thickness 5.40 mm	75	Metre	2003.7	150277.5
41	24.11	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed /plain bevel ended pipe (type A) of required dia, conforming to IS:8110, of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer -in-charge.				
	24.11.3	200 mm nominal size dia.	20	Metre	2119.1	42382

42	24.12	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	8	Hour	916.8	7334.4
Total cost of 1 Tube well : Rs.						
43	N.S.	Supply, Installation, testing & Commissioning of suitable capacity and type of submersible pump set capable to discharge 20,000 ltrs. of clean filtered water from a 250 mm x 150 mm deep tubewell at a total head of 30 meter, complete with control panel, 24 Metres of suitable size G.I. column pipe, bend, gate valve nipple supporting clamp, 30 Metres of neoprene cable etc. complete as required. (payment will be made as per actual voucher/receipt submitted by contractor.)	1	Set	100000	0
						316363.1
43		Add extra cost for New GST increase 12% to 18 % (Rate as analysis of BCD 1-1-22)BCD Letter no- 5751(H) - 18-07-2023 (taking multiplying factor 5.36% for over all estimate)	%		1.0536	333320.1622
Total cost of 1 Tube well without submersible pump : Rs.						E 333320.1622
SEPTIC TANK						
Differences cost of materials						
Bricks 100A						
Cement						
Rate Based on BCD SOR, 2022 Analysis						
Supplying materials, labour for constructing Septic Tanks of following sizes & as per sections given in the Drawings & Designs, all complete as per specifications and direction of Engineer-in-charge.						
ST-2 [4.0 mtr (long) x 2 mtr (wide) x 2 mtr (deep) {of inside finished size as per design & drawings}]						
Statement of Analysis per Unit						
Unit : Each						
44	2.6	Earth work in excavation over areas (exceeding 30 cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m ; disposed earth to be levelled and neatly dressed.				
	2.6.1	All kinds of soil	22.81	cum	314.90	7181.59
		for ground water harvesting	13.42	cum	314.90	4224.41
45	2.28	Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.	1.37	Cum	287.30	393.81
46	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.				
	4.1.3	1:2:4 (1 Cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	1.37	Cum	3998.10	5480.35
47	11.72	Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes royalty all complete as per specification and direction of E/I.	8.00	Per M2	283.30	2266.40
48						
49	6.1A	Brick work with bricks of class designation 100A in foundations and plinth in :				
	6.1.14A	Cement mortar 1:6 (1 cement: 6 coarse sand)	3.41	Cum	5662.10	19334.66

50	6.1.12/1	Cement mortar 1 :4 (1 cement: 4 coarse sand)	5.46	cum	5860.10	31974.17
51	13.17.1	12 mm cement plaster 1:3(1 cement: 3 coarse sand) finished with a floating coat of neat cement for water harvesting pit	27.65	Sqm	203.60 244.80	5629.54 6769.92
52	5.1	Providing and laying in position specified grade of reinforced cementconcrete excluding the cost of centring,shuttering,finishing andreinforcement-All work upto plinth level			203.60	
	5.1.2	1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate20 mm nominal size)	1.54	Cum	4688.30	7221.38
		RCC Slab for rain water harvesting pit	0.66		4688.30	3115.68
53	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.22.78	10 mm dia Tor	154.03	kg	92.60	14263.15
		Total Cost Per Unit		TOTAL (A)		-104026.06
54		Carriage of Materials				
		Bricks (lead -1 km kutcha + 7 km pucca)	4693.50	% No.	1179.73	5537.06
		Coarse Sand (Lead - 170 K.m)	4.06	cum	3723.30	15129.56
						0.00
		Stone Chips (Lead - RLY-428 K.m + 10 TRUCK)	2.53	cum	2969.31	7510.01
		Local sand (1 km kutcha + 2 km pucca)	1.49	cum	310.65	463.22
55		Differences cost of materials				0.00
		Bricks 100A	4693.50	% No.	362.60	1701.86
		Cement	37.72	bag	11.69	440.97
						-134808.73
		Add extra cost for New GST increase 12% to 18 % (Rate as analysis of BCD 1-1-22)BCD Letter no- 5751(1) - 18-07-2023 (taking multiplying factor 5.36% for over all estimate)	%		1.0536	-142034.48
56		Seigniorage Fee				
	(i)	Bricks (lead - 1 km kutcha + 7 km pucca)	4693.50	% No.	512.80	2406.83
	(ii)	Coarse Sand	4.06	cum	17.58	71.44
	(iii)	Stone Chips 20MM	1.75	cum	59.54	104.19
		Stone Chips 10MM	0.78	cum	65.79	51.32
	(iv)	Local sand (1 km kutcha + 2 km pucca)	1.49	cum	14.85	22.14
					F	-144690.39
ELECTRIFICATION						
57	1.3	Wiring for light point/ fan point/ exhaust fan point / call bell point with 1.5 Sq.mm FR PVC insulated copper conductor cable in recessed PVC conduit with modular type switch , modular plate, suitable size GI box etc as required.				
	1.3.3	Group C	39	Point	1146.00	44694
58	1.31	Supplying and fixing suitable size GI box with modular plate and cover in recess including providing and fixing modular type 3 pin 5/6 amps socket outlet & 6A switch connection etc. as required.	39	Each	414.00	16146
59	1.32	Supplying and fixing of suitable size GI box with modular plate and cover in recess including providing and fixing modular 6 pin 15/16 amp socket outlet &15/16 amp modular switch including connection,painting etc as required	24	Each	531.00	12744
60	1.5	Wiring for light/ power plug plug with 2 X 4 sq. mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit along with 1 Nos 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required	99	meter	309.00	30591
61	1.33	Supplying and fixing 2 pin, 6 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	25	Each	64.00	1600
62	1.34	Supplying and fixing Batten/angale holder on the existing junction box/pvc box including connection etc. as required.	12	Each	80	960
63	1.7	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.				
	1.7.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	110	Meter	201	22110
	1.7.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	110	Meter	246	27060

102583.63

133366.31

140514.74

143170.66

1.7.11	4 X 6 sq. mm + 1 X 6 sq. mm earth wire	22	Meter	660	14520
1.7.12	4 X 10 sq. mm + 1 X 10 sq. mm earth wire	22	Meter	925	20350
64	1.15	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/ recessed PVC conduit as required			
	1.15.1	100	Meter	38	3800
65	1.38	Supplying and fixing electronic musical call suitable for single phase, 230 volts complete bell as required.			
		2	Each	351	702
66	1439	Supplying and fixing modular type 25 amps A.C. unit box with ON/OFF MCB on surface or in recess complete with connections, testing and commissioning etc as required.			
		10	Each	375 522.57	3750 5220
67	1.57	Supplying and fixing Suitable G.I box with modular plate & cover in front of surface or in recess including providing and fixing 4 nos. 3 pin 5/6 amps modular socket outlet & 4 nos 5/6 amps modular switch, connection etc as required.(Use for computer point)			
		10	Each	1064	10640
68	2.9	Supplying and fixing following way, horizontal type,three pole & neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus - bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator			
	2.9.1	2	Each	4184	8368
69	2.12	Supplying and fixing following rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.			
	2.12.1	10	Each	237	2370
	2.12.8	2	Each	2329	4658
70	5.7.4	Supplying and fixing recess mounted 18 watt LED downlighter complete with integrated electronic driver & LED directly on ceiling including connection with 1.5 sq.mm FR PVC insulated copper conductor cable and earthing the body etc. as required.			
		24	Each	1509	36216
71	6.1.6	Supplying and fixing of following types lamp in the existing electrical fitting/ fixtures etc. as required. 15 watt LED lamp			
		25	Each	250	6250
72	5.8.3	Supplying and fixing Surface mounted 18 watt LED downlighter complete with integrated electronic driver & LED directly on ceiling including connection with 1.5 sq.mm FR PVC insulated copper conductor cable and earthing the body etc. as required.			
		12	Each	1694	20328
73	5.6.2	Supplying and fixing following types aluminum extruded suspended type LED luminaire with minimum efficacy 100lm/w ensuring continuous illumination including suspension system complete with electronic driver etc and connection with 1.5 sq mm FRLS PVC insulate copper conductor cable as required 4feet* 40 watt .			
		2	Each	4587	9174
74	5.14.4	Supplying and fixing 90 watt LED type street light with die cast aluminium housing for ingress protection of IP66 and complete with all accessories etc. on pole/building including connection with FR PVC insulated copper conductor cable and earthing the body etc. as required.			
		2	Each	5516	11032
75	8.5	Supplying and fixing of 32 mm dia X 1.00 metres long G.I. pipe (medium class) bracket for mounting of fluorescent / HPMV/ HPSV/ CFL street light fitting on pole including bending the pipe to the required shape, 2 nos 40 mm X 3 mm flat iron clamps with nuts, bolts and washer, painting the flat iron with primer and finish paint etc. as required.			
		2	Each	1038	2076

56

20	8.15	Supply and installation of regular/standard model A.C. ceiling fan of 1200 mm sweep including wiring the down rods of standard length (upto 30 cm) with 1.5 sq.	12	Each	2482	29784
76	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate/ switch box including connections but excluding modular plate etc.as required.	12	Each	358	4296
77	8.17.1	Supply and installation of 250 mm, 230 v A.C. exhaust fan in the existing opening including making good the damage, connection testing, commissioning etc as required.	5	Each	2288 -2572	11440 -12860
78	8.10.2	Supplying and fixing wall/floor mounted cubical panel board, fabricated with 16 gauge iron sheet, suitable for panel mounted switch disconnector, including bus-bar chamber, insulator and painting etc. as required. (but without busbar copper strip)	0	sqft	1382	
79	2.4	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections etc. as required.				
	2.4.3	160 Amp, 36 KA	1	Each	13698	13698
	2.4.18	500 Amp, 35 KA	0	Each	27209	0
80	2.7	Providing and fixing following capacity four pole ONload/ panel mounted changeover switches inside the existing cubical panel board including drilling holes in cubicle panel, making connections etc. as required.				
	2.7.6	200 Amp, four pole	1	Each	18271	18271
81	3.6	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe 2.7 metre long etc. with charcoal/ coke and salt as required.	1	Set	13721	13721
82	3.17	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing etc. as required.	49	mrt	116 -144	5684 -7056
		Total			G	-409825
FIRE HYDRANT						
83		Providing, laying, testing & commissioning of 'B' class heavy duty G.I. pipe conforming to IS 1239 including welding, fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required				
	27.8.6	80 mm dia	5	meter	1082	5410
	27.8.7	100 mm dia	32	meter	1445	46240
84		Supplying and fixing single headed internal hydrant valve with instantaneous Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required				
	27.9.2	Single headed Stainless steel	4	Each	5722	22888
85		Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required				
	27.11.5	100 mm dia	3	Set	6056	18168
86		Supplying, fixing, testing & commissioning of double flanged sluice valve of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780 of following sizes as required :				
	27.12.5	100 mm dia	1	Set	14109	14109
87	27.13	Supplying and fixing orifice plate made out of 6 mm thick stainless steel (Grade 304) with orifice of required size to be fitted between flange & landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm2 complete as required.	4	Each	1236	4944

408503

88		Providing, installation, testing and commissioning of non-return valve of following sizes conforming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required				
	27.14.5	100 mm dia	1	Set	10478	10478
89		Providing, installation, testing and commissioning of stainless steel Ystrainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.				
	27.15.2	100 mm dia	2	Each	6048	12096
90		Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required				
	27.16.2	Stainless steel (Grade 304)	4	Set	4445	17780
91		Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following asrequired. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 globe valve & nozzle. 20 mm nominal internal dia gun metal Drum and brackets				
92	27.17.2	Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket 40 m	4	set	9616	38464
93		Supplying & fixing 63 mm dia gun metal short branch pipe with 20 mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous connection to interconnect hose pipe coupling as required				
	27.18.2	Stainless steel (Grade 304)	4	Each	1631	6524
94		Supplying and fixing of fire brigade connection of cast iron body withgun metal male instantaneous inlet couplings complete with cap andchain as reqd. for suitable dia MS pipe connection conforming to IS904 as required				
	27.19.1	2 way-100 mm dia M.S. Pipe	2	Set	6331	12662
95	27.2	Supplying and fixing air vessel made of 250 mm dia, 8 mm thick MSsheet, 1200 mm in height with air release valve on top and flangedconnection to riser, drain arrangement with 25 mm dia gun metalwheel valve with required accessories, pressure gauge andpaintingwith synthetic enamel paint of approved shade as required.	1	Set	17707	17707
96	27.22	Providing & fixing of pressure switch in M.S. pipe line including connection etc. as required.	1	Each	1442	1442
		Total Cost For Fire Hydrant System			H	228912
		TOTAL B.O.Q AMOUNT OF SCHEDULE RATE ITEM (1 TO 96 sr. nos)	A+B+C+D+E+ F+G+H		RS	6497367 -6502834-

CERTIFIED COPY
11/9/23
Junior Engineer

11/9/23
Assistant Engineer
L.A.E.O, WD-01, BETTIAH

13/9/23
Executive Engineer
L.A.E.O, WD-01, BETTIAH

BOQ is approved from Serial No. 1 to 32 for Building work and Serial No. 1 to 96 for W.S works, Sewage & Drainage, tubewell, septic tank, Electrification and fire hydrant work for amount of ₹ 6497367 (Sixty four Lac ninety seven thousands three hundred and sixty seven only)

Anish
2/11/23
सहायक अभियंता
स्था० क्षेत्र अभि० संगठन
तिरहुत प्रमंडल, मुजफ्फरपुर

sd -
अधीक्षण अभियंता
योजना एवं विकास विभाग
स्थानीय क्षेत्र अभियंत्रण संगठन
तिरहुत प्रमंडल, मुजफ्फरपुर
11/11/23

अधीक्षण अभियंता
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तिरहुत प्रमंडल, मुजफ्फरपुर

Office- The National Central Co- Operative Bank Ltd., Bettiah
समेकित सहकारी विकास परियोजना, पश्चिम चम्पारण, बेतिया

Office- The National Central Co- Operative Bank Ltd., Bettiah

NS- ITEM (WATER SUPPLY ITEMS , AC & FURNITURE etc)								
Item	Sr. NO	SOR	Description	Unit	Quantity	Quoted Rate in figures (RS)	Quoted Rate in Word (RS)	Quoted Amount (RS)
						(The quoted rate should be inclusive of all taxes / cess , Royalty, Seignorage fee, carriage, Transportation cost of all materials from sourcess to work site ,all overhead charges etc , complete in all respects)	(The quoted rate should be inclusive of all taxes / cess , Royalty, Seignorage fee, carriage, Transportation cost of all materials from sourcess to work site ,all overhead charges etc , complete in all respects)	
	1		Supply,Installation, testing & Commissioning of suitable capacity and type of submersible pump set capable to discharge 20,000 ltrs. of clean filtered water from a 250 mm x 150 mm deep tubewell at a total head of 30 meter, complete with control panel,24 Metres of suitable size G.I. column pipe, bend, gate valve nipple supporting clamp, 30 Metres of neoprene cable etc. complete as required. (payment will be made as per actual voucher/receipt submitted by contractor.)		1			
	2	MR	Supply & install DC to AC inverter of ISI marked 2000kva with Tublar Battery (600 AMP) with all fittings & fixing ,3 years guarantee over		1	each		

(65)

2	3	MIR	Supply & install inverter Hi wall split AC units indoor / outdoor (copper condenser) complete with pipping , cordless remote control units , copper pipe, stands etc.as required .EER 3.5 of capacity	6	each			
			1.5 TR					
3	4	MIR	Supply and installation of reputed, approved make of ISI mark copper wound heavy duty voltage stabilizer suitable for 1.5 TR AC , all complete with all safety features, including Hi- Low cut off , TDR facility , voltage range from 130-280 volts etc. with all plugs,sockets,switches etc capacity 4KVA	6	each			
4	5	MIR	Supply and laying 30 X 2.5 SQMM Cable for connection of AC	100	M			
5	6	MIR	Man table with back unit main table size 1800 x 1800 x780 H back unit size 1800x400x2000 top made of 500 mm thick structure through out. Top depth - 1800 mm L X 800 MM DX 750MM one set of three drawers W550 mm inegrated with the main top, Sides return size -W905 mm x 500 mm x750 mm one oprn self for CPU / File keeping table top aluminium id provided with flip cover is provided for easy management of wires. The whole table is integrated as one unit, lather handles are provided for opening of drawers and provided in dual combination of rose wood and black ,(including OH 15% contactor profit and 1% Labour cess) make : Featherlight, wipro, Marino or equivalent as per direction oo E/I.	2	each			

6	7	High back with imported lather chair with multilocking and gas lift with Alu. Buffed arms and base (with head rest) (including OH & CP -15% , LC-1%) make ; Featherlight, wipro, Marino, or equivalent as per direction of E/I.	2	each			
7	8	Executive medium back with imported lather chair with multi locking with gas lift Alu. Buffed arms and base (including 15% OH & CP , LC -1%) make : ; Featherlight, wipro, Marino, or equivalent as per direction of E/I.	5	each			
8	9	Visitor chair with chrome platted stage base and fixes arms, latherite back and seat. (including 15% OH & CP , LC -1%) make : ; Featherlight, wipro, Marino, or equivalent as per direction of E/I.	30	each			
9	10	Cupboard swing doors with four selves five levels of box file , capacity=50 box files . W900 X D450 X H770. (including 15% OH & CP , LC-1%) make: Featherlight, wipro, Marino, or equivalent as per direction of E/I	5	each			
10	11	Dash board units of required height & width for c.f hall ISI marks : (Including 15% OH & CP , LC-1%) make: Featherlight, wipro, Marino, or equivalent as per direction of E/I	1	each			
11	12	Supply & fixing voice mike speaker , wall hanging speaker with amplifier of ISI marks or reputed brand manufacturer for dash board mike. etc(including 15% OH & CP , LC-1%) make: Ahuja , sony . Lg. samsung , or equivalent as per direction of E/I all complete job .	1	each			
							RS