

ABSTRACT OF COST

NAME OF WORK : Renovation of Old Teacher's Residence 4 unit 2 blocks (01 to 04) in the Campus of Netarhat Residential School, Netarhat

S. No.	Item of Work	Amount (Rs.)
01.	Estimate for Old Teacher's Residence	1652748.00
02.	Water Supply & Sanitary Works	164086.00
03.	Internal Electrification	85868.00
	Total	1902702.00
	Add GST 18%	342486.00
	Total	2245188.00
	Add Labour Cess @ 1%	22452.00
	Total	2267640.00
	Say	2267600.00

Annexure - I

Cost Estimate For Renovation of old Teacher's Residence (2 block-4 unit--- 1 to 4)												
SL. NO	ITEM NO.	DESCRIPTION OF ITEM	NOS.	LENGTH	WIDTH	HEIGHT / DEPTH	MF	TOTAL QUANTIT Y	UNIT	Rate	Amount	
				(M)	(M)	(M)				Rs.	Rs.	
1	5.10.7	Dismantling old plaster and pointing in cement or lime and raking out joints to 15 mm. depth, watering and disposal of unserviceable materials with all leads all complete as per direction of E/I.										
		External Plaster										
		Ground Floor										
		Outer Building Length Ground Floor	1	217.000	Length h	14.000		3038.00				
		Outer Building Length First Floor	1	217.000	Length h	12.000		2604.00				
								5642.00	SFT			
		Total External Plaster						524.35	A			
				Ground Floor Lvl.								
				Internal Plaster								
		Verandah	2	7.333	11.50 0	12.000	2	903.98				
		Room-1	2	13.917	11.50 0	12.000	2	1220.02				
		Room-2	2	11.500	13.50 0	12.000	2	1200.00				
		Toilet	2	5.167	8.830	12.000	2	671.86				
		Dinning	2	9.750	8.830	12.000	2	891.84				
		Kitchen	2	8.830	8.830	12.000	2	847.68				
		Store Room	2	8.830	8.830	12.000	2	847.68				
		Below Stair	2	14.000	6.583	12.000	2	987.98				
		Decduction										
		D1	-2	3.500		7.000	2	-98.00				
		D2	-6	3.000		7.000	2	-252.00				
		D3	-3	2.500		7.000	2	-105.00				

		W	-4	2.000		4.000	2	-64.00			
		W1	-2	3.000		4.000	2	-48.00			
		W2	-2	4.000		4.000	2	-64.00			
		W3	-1	5.000		4.000	2	-40.00			
		V	-2	2.000		2.000	2	-16.00			
								6884.04	SFT		
		Total Ground Internal Plaster						639.78	A		
		First Floor Lvl.									
		Verandah	2	7.333	11.50 0	12.000	2	903.98			
		Room-1	2	13.917	11.50 0	12.000	2	1220.02			
		Room-2	2	11.500	13.50 0	12.000	2	1200.00			
		Toilet	2	5.167	8.830	12.000	2	671.86			
		Dinning	2	9.750	8.830	12.000	2	891.84			
		Stair wall	2	14.000	6.583	12.000	2	987.98			
		Terrace	2	20.583	8.830	5.000	2	588.26			
		Decduction									
		D1	-1	3.500		7.000	2	-49.00			
		D2	-4	3.000		7.000	2	-168.00			
		D3	-2	2.500		7.000	2	-70.00			
		W	-2	2.000		4.000	2	-32.00			
		W1	-1	3.000		4.000	2	-24.00			
		W2	-2	4.000		4.000	2	-64.00			
		W3	-1	5.000		4.000	2	-40.00			
		V	-2	2.000		2.000	2	-16.00			
								6000.94	SFT		
		Total First Internal Plaster						557.71	B		
		Total Internal Plaster (A+B)						1197.49	SQM		
		Total Internal and External Plaster						1721.84	SQM	C	
		Taking 5 %						86.09	SQM		1,847.53

8	5.10.11	Taking down chowkhat in doors including stacking serviceable materials within 15M. lead and disposal of unserviceable materials with all leads all complete as per direciton of E/l.									
		Taking down window									
		D1	1			2	2.00				
		D3	2			2	4.00				
		Total					6.00	Each	89.88	539.28	
9	5.10.12	Taking down chowkhat in Windows including stacking serviceable materials within 15M. lead and disposal of unserviceable materials with all leads all complete as per direciton of E/l.									
		Taking down window									
		W1	1			2	2.00				
		W2	1			2	2.00				
		Total					4.00	Each	138.07	552.28	
10	5.10.10	Taking down old door and window shutters including stacking serviceable materials within 15M. lead and disposal of unserviceable materials with all leads all complete as per direciton of E/l.									
		Window Shutter					4.00				
		Door Shutter					6.00				
		Total					10.00	Each	45.12	451.20	

11	5.4.1	Suppling, fitting and fixing good quality, well dressed and well seasoned sal wood work in chaukhat in doors, windows, skylight, fanlights and celetial windows openings, including wedge over clamps all complete including application of two coats of wood preservative of approved quality on the surface butting walls and lintels all complete as per building specification and direction of E/l									
		W1	1	4.200	0.075	0.125	2	0.079			
		W2	1	4.800	0.075	0.125	2	0.090			
		D1	1	5.250	0.075	0.125	2	0.098			
		D3	2	4.950	0.075	0.125	2	0.186			
		Total						0.453	CUM	66,362.06	30,049.57
12	5.4.11	Supplying , fitting and fixing 38 mm thick good quality , well dressed and well seasoned sal wood fully paneled shutters in doors and windows with 25 mm thick panels with one side plain and other side chamfered with aluminium fittings such as hinges, sliding doors, bolts, tower bolts, handles or rings, hooks and eyes cleats, sand blocks as per schedule and 3mm thick plain glass panes fitted with sal wood beads and taxes all complete as per building specification and direction of E/l.									
		D1	1	1.050		2.100	2	4.410			
		D3	2	0.750		2.100	2	6.300			
		Total						10.710	SQM	4,583.75	49,091.96

13	5.4.22	Supplying, fitting and fixing 38 mm thick good quality, well dressed and well seasoned Sal wood 1/3 glazed and 2/3 paneled shutters in windows with iron fittings such as hinges, sliding doors, bolts, tower bolts, handles or rings, sand blocks as per schedule and 3 mm thick plain glass fitted with sal wood beads, taxes all complete as per building specification and direction of E/I.									
		W1	1	0.900	1.200	2	2.16				
		W2	1	1.200	1.200	2	2.88				
		Total					5.04	SQM	3,682.57	18,560.15	
14	5.8.31	Providing two coat of synthetic enamel paint over old wooden surface to give desired texture and gloss with apporoved make and shade of ready mixed french polish including preparing the surface sfter cleaning removing dirt									
		Door area									
		D1	3	3.500	7.000	2	147.00				
		D2	10	3.000	7.000	2	420.00				
		D3	5	2.500	7.000	2	175.00				
		W1	3	3.000	4.000	2	72.00				
		W2	4	4.000	4.000	2	128.00				
		W3	2	6.000	4.000	2	96.00				
		V	4	2.000	2.000	2	32.00				
		W	6	2.000	4.000	2	96.00	SFT			
		Total 100% taking					1166.00	SQM			
							108.36		120.82	13,092.58	

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5.12.1

Water proofing for old and New Roof Slab :- Providing and laying water proofing treatment on roof slab by applying two Component, factory designed, ready to use, acrylic modified flexible material brush, roller or spray for water proofing coating per manufacturer Specifications with following steps :-
(a) surface preparation .-Providing and cleaning of concrete surface to remove dust, oil, grease including removal of existing (loose paint / coating, and cement laitance by cleaning with compressed air water jet including all materials, labour, tools complete. Ponding test to be done after plugging all outlets and to be checked from soffit to identify seepage leakage. On identification of seepage cement grouting to be done with non shrink expanding admixture of Sika India Pvt.Ltd.) MYK Schomberg / Dr Fixiti/ Fosroc or equivalent. Providing and repairing of all Corner and joints such as those between the parapet wall and the roof slab etc shall be chamfered with 150mm X 150 mm fillet of mortar (Cement: sand - 1:4) admixed with acrylic polymer of Sika/ Fosroc/MYK Schomberg/Dr 1:4) admixed with acrylic polymer of Sika/ Fosroc/MYK Schomberg/Dr Fixit or equivalent., Before 'Chamfering a prime coat shall be given with the slurry of acrylic polymer Repairing surface irregularities, damaged concrete in base slab, dead cracks if any, with an acrylic polymer modified repair mortar-including a coat of bonding agent of the same with cement slurry including all material, labour, tools complete.**(b) 1st Coat** :- Apply 1st coat of two component

acrylic modified, ready to use, flexible cementitious material on surface saturated dry roof and inside wall of Parapet. Wall upto 600 mm by brush or roller . After 1st coat of application , 45 gsm of Fibre glass cloth to lay when the first layer is still green. 1st coat should be applied @1.50 kg/Sqmt/coat. For the purpose of measurement the entire treated surface will be measured." (c) 2nd Coat :-To apply the 2nd coat of two component acrylic modified ready to use, flexible cementitious material right angle to the 1st. coat over the glass fibre laid surface: 2nd coat-,should be applied @ 0.7 Sqmt/coat. For the purpose of measurement the entire treated surface will be measured." After three days of drying the 2nd coat , the rain water outlets to be plugged and ponding test to be done for 48 hours to identify seepage, leakage from soffit and if found necessary rectification to be done as per satisfaction of E/C. The waterproof coating to be protected from damage before screed over it. Water proofing Brand:- Sika Topseal 109hi / Fosroc Brushbond RFXI Dr. Fixit Pidiffin 2K / MYK Aquafin TG . Product Performance - Chemical Base Part A: Acrylic copolymer, Part B: Specially graded cementitious powder - Density 1.6 kg/l (mixed density) at +27°C Tensile Strength -2 N/mm² after 28 days (with Fibre cloth) (According to ASTM D 2370) Pullout Bond Strength -2 N/mm² concrete failure According to ISO4624) Slant-Shear Bond Strength -4 N/mm² (According to FIP 5.15) Elongation at Break -35% Without Fibre Cloth and 20% with Fibre Cloth (According to ASTM D 2370) (d)

20	12.42/ DSR	Providing & fixing on wall face unplasticised- PVC moulded fittings/accessories for unplasticised - Rigid PVC rain water pipes conforming to IS 13592 Type A including jointing with seal ring conforming to IS 5382 leaving 10mm gap for thermal expansion									
	12.42.5. 2	Bend -110 mm						12.000	NOS	114.39	1,372.74
	12.42.6. 2	Shoe - 110mm						12.000	NOS	100.49	1,205.82
	12.42.1. 2	Coupler- 110mm						6.000	NOS	103.95	623.71
21	12.43.2/ DSR	Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plgs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.									
								47.000	NOS	268.22	12,606.38
22	DSR / 15.23	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead For thickness of tiles 10 mm to 25 mm									
		For Wall Tiles									
		Ground Floor									
		Toilet	2	5.167	8.830	7.000		391.92			
		Kitchen	2	8.830	8.830	7.000		494.48			
								886.40	SFT	60.50	

25	5.3.11	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 above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size).									
		Ground Floor									
		Chajja	2	20.000	2.000	0.250		20.000			
								0.566	SQM	6308.87	3,572.91
26	5.3.17.1 9	Centering and shuttering including strutting, propping etc. and removal of form for : Lintels, beams, plinth beams, girders, bressumers and cantilevers									
		Ground Floor									
		Chajja Veranda	2	20.000	2.000			80.000	SFT		
								7.43	SQM	445.55	3,312.63
27	5.5	Providing TMT reinforcement of following dia rods as per approved design and drawing including carriage of M.S. rods of (Straight or in coils) to work site, cutting, bending and binding with annealed wire with cost of wire removal of rust placing the rods in position all complete as per building specification and direction of E/I.									
			QTY. (CUM)	RF/CUM (KG)	RF (KG)			WT(MT)			
		RCC IN Chajja	0.566	80.000	45.28			0.045			

					0						
			0.57					0.045	MT		
	5.5.4	8 mm dia (40 %of total reinforcement)						0.018	MT	83,314.0 2	1,507.98
	5.5.5 a	10mm dia (60%of total reinforcement)						0.027	MT	82,096.5 4	2,231.38
28	DSR / 10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.									
		Roof Beam (ISMB)	7	60.000				420.00			
			12	34.000				408.00			
								828.000	FEET		
								252.44	METRE		
		Taking 8.9 kg/m					8.9	2246.71	KG		
		Taking 10%									
		Total						224.67	KG	67.77	15,225.89
29	5.9.15	Providind 12mm flat pressed particle board ceiling with 120X60 mm sal wood beams at 122 cm centres ---do---do--- complete job.									
		First Floor Lvl.									
		Verandah	1	7.333	11.50 0		2	168.659			
		Room-1	1	13.917	11.50 0		2	320.091			
		Room-2	1	11.500	13.50 0		2	310.500			
		Dinning	1	9.750	8.830		2	172.185			
		Toilet	1	5.167	8.830		2	91.249			

Annexure - II

Old Teachers Residence (2- Block- 4 unit,1-4)						
ABSTRACT OF QTY. & DETAIL ESTIMATES						
THE RATES OF ITEMS ARE BASED ON S.O.R. 2022 and D.S.R.2021						
SANITARY & WATER SUPPLY WORKS						
Sl. No.	Item No.	Description	Qty.	Unit	Rate	Amount
1	3.2.2 (i) (b)	Supplying, fitting and fixing 40 mm high vitreous white glazed earthen ware E.W.C. with "p" trap of Parry Hindustan or any other I.S.S. make including supplying & fixing 15 litres C.I. mosquito proof low down flushing cistern of approved make with complete fittings with C.I. handle and R.S. or bracket with telescopic flush pipe with brass coupling and plumbers joints spindle stop cock of approved quality weight not less than 450 grms. , 15 mm P.V.C. alkathene pipe 45 cm long with brass coupling at both ends and white/ black plastic solid state seal and lead of commander/ cuckoo or other I.S.S. make with hinges or screw etc. painting pipe and cistern etc. with 2 coats of approved paint over a coat of red oxide primer etc. all complete as per specification and direction of E/l. (A) With "P" trap (a)12.5 lit. low level P.V.C. cistern	4	EACH	4,786.86	19,147.44
2	3.5.1	Providing and fixing C.P. brass bib cock of approved conforming to IS 8931 : 15 mm nominal bore	4	EACH	354.59	1,418.36
3	DSR 18.51.1	Providing and fixing C.P.brass long body bib cock of approved quality conforming to standard and weight not less than 690gms.:15 mm nominal bore.	4	EACH	613.92	2,455.67
4	DSR 18.65	Providing and fixing PTMT Soap Dish Holder having length of 138 mm breadth 102 mm, height of 75mm with concealed fitting arrangements, Weighing not less than 106 gms.	4	EACH	83.85	335.38
5	DSR 18.53.1	Providing and fixing C.P. brass angle valve for basin mixer and gyser points of approved quality conforming to IS 8931 15mm nominal bore, approved brand C.P. fittings.	4	EACH	433.62	1,734.47
6	DSR 18.75.1	Providing & fixing Nipples 15 mm size with 12" BSP threads, 70 mm length and 30 mm breadth and weight not less than 18gms.	10	Each	37.31	373.08

7	3.2.5	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 :Falt back wash basin size 630X450 mm with a single 15mm C. P. pillar tap.	2	EACH	2,084.36	4,168.72
	DSR 17.28.2.2	Providing and fixing 32 mm waste pipe for sink or wash basin including PVC waste fitting complete	6	Each	90.43	542.59
8	DSR 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. This includes joining of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of E/I. (Approved Brand - ASTRAL/ SUPREME)				
		Concealed work including cutting chases and making good the wall etc..				
	a) 18.8.1	15mm dia	10	METER	406.23	4,062.30
	b) 18.8.2	20mm dia	10	METER	438.71	4,387.10
		Exposed on Wall				
	c) 18.7.3	25mm dia	10	METER	327.69	3276.90
		32mm dia	10	METER	423.33	4233.30
	3.3.8 JSR	Supplying and material with labour for construction inspection chamber of designation class 75b bricks deep 600X450 internal diameter having 250mm wall thickness in cement mortar (1:6) including 12mm cement plaster (1:4) with plumbing on inside and cement (1:6) with 600X450 mm GI cover with frame (weight not less than 36kg) in foundation and refilling all complete as per specification and direction E/I	2	Each	8636.35	17272.70
	3.1.6	Providing and fixing C.P. brass Stop Cock (concealed) of standard design and of approved make conforming to IS 8931 15mm nominal bore, approved brand C.P. fittings.	4	EACH	177.40	709.60

9	M079 pg.nos:- 31	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	2000	pre liter	7.76	15518.25
10	DSR 17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	4	EACH	177.40	709.59
	3.1.21 JSR	Providing & fixing cp towel rail complete brackets fixed to wooden cleats with cp brass with concealed fitting arrangement of approved qualite colour and make (make on equipment)	2	EACH	664.82	1329.64
11	DSR 18.64	Providing and fixing PTMT/ C.P. swivelling shower ,15mm nominal size, 95mm long, 65mm dia. of approved quality, color & make weighing not less than 40 gms with approximate 80 holes of 1.2 mm dia.	4	EACH	91.99	367.97
Total No of Building = Rs.						82043.07
For 1 Building Rs.						82043.00
Total No of Building = 2						Rs. 164086.00

Annexure - III

Estimate For Repair of Old Teachers Residence 4 unit (01 to 04)

The rate of items are based on schedule of rate Energy Deppt. W.e.f. 28th July-2022

			Qty.	Unit	Rate	Amount
1	1.3	Wiring for lig/fan point/exhaust fan point/call bell point with 1.5 sq mm FR PVC insulated copper conductor single core cable in surface/recessed conduit				
	1.3.1	Group –A	10	Point	607.00	6070.00
2	1.23	S/F Piano type switch/socket:-				
		Supplying and fixing following piano type switch/socket on the existing switch box/ cover including connections etc. as required.				
	1.23.1	5/6 amps, one way switch	12	Each	32.00	384.00
	1.23.4	3 pin 5/6 amps, socket outlet	12	Each	43.00	516.00
	1.23.3	15/16 amps, one way switch	12	Each	92.00	1104.00
	1.23.5	15/16 amps, 6 pin socket outlet	12	Each	90.00	1080.00
3	1.7	Wiring for circuit submain wiring along with earth wire with the following sizes of PVC insulated copper conductor single core cable in surface of recessed PVC conduit as reqd.				
A	1.7.1	2 x 1.5 sq mm + 1x 1.5 sq mm earth wire	10	Mtr.	147.00	1470.00
B	1.7.2	2 x 2.5 sq mm + 1x 2.5 sq mm earth wire	10	Mtr.	196.00	1960.00
C	1.7.4	2 x 6 sq mm + 1x 6 sq mm earth wire	10	Mtr.	351.00	3510.00
4	1.25	S/F modular type stepped tube electronic fan regulator on the existing plate switch box including connection but excluding modular plate etc as required	8	Each	293.00	2344.00
5	1.22.7	S/F metal box of 180 x 100 x 60 m deep on surface/recessed with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 and 15/16 amp socket outlet and 15/16	12	Each	215.00	2580.00
6	1.34	S/F brass batton/Angle holder including connection etc. as reqd.	12	Each	59.00	708.00
7	1.33	S/F 3 point 5 Amp ceiling rose on the existing junction Box wooden block including connection etc. as reqd.	8	Each	45.00	360.00
8	9.5.2	20/22 watt LED Tube Light	4	Each	628.00	2512.00
9	2.8	S/F the following way single pole and nutral sheet steel M.C.B.D.B consumer unit 240 V on surface/recess				
	2.8.4	2+8 way	4	Each	841.00	3364.00
10	2.11	S/F 'B' series S.P. MCB:-				
		Supply and fixing 6 amps to 32 amps rating 240 volts, 'B' series, miniature circuit breker suitable for lighting				

	2.11.1	6/32 amps, single pole, "B" series		4	Each	244.00	976.00
11	2.12	S/F 'C' series MCB:-					
		Supply and fixing ollowing, 240 volts, 'C' series, miniature circuit breker suitable for inductive loads of					
	2.12.3	6/32 amps, SPN		4	Each	443.00	1772.00
	2.12.10	50/63 amps, DP		4	Each	1308.00	5232.00
12	9.4.1	supply of 48" (1200 mm) ceiling fan Bajaj/Crompton or any other approved make etc without regulator		4	Each	1748.00	6992.00
Sub-Total Rs.							42934.00
Total Number of Building = 2 Nos							Rs. 85868.00