

DETAILED ESTIMATE FOR CONSTRUCTION OF PHC -----
PART-I (SUB STRUCTURE - UPTO PLINTH LEVEL)

S.No.	Description of Item	Qty.	Rate	Unit	Amount								
1	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) 2.6.1												
	All kinds of soil												
	Col	2	x	1.8	x	1.8	x	2.2	14.26				
		27	x	2	x	2.2	x	2.2	249.48				
		21	x	1.8	x	2.1	x	2.2	174.64				
									438.37	438.37	129	Cum.	56550.00
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :												
	4.1.2 With 40mm nominal size graded stone aggregate.												
	4.1.2.1 M 15 - Grade concrete												
	Col.	2	x	1.8	x	1.8	x	0.15	0.97				
		27	x	2	x	2.1	x	0.15	17.01				
		21	x	1.8	x	2.1	x	0.15	11.91				
						A			29.89	29.89	4403	cum	131606.00
3	Centering and shuttering including strutting, propping etc. and removal of form for :												
	5.9.1 Foundations, footings, bases of columns, etc. for concrete up to plinth level.												
	Col. Footing	2	x	6	x	0.6			7.2				
		27	x	6.4	x	0.6			103.68				
		21	x	6.2	x	0.6			78.12				
	Col.	2	x	1.6	x	2			6.4				
		27	x	1.6	x	2			86.4				
		21	x	1.2	x	2			50.4				
		1	x	130	x	0.8			104				
		1	x	140	x	0.9			126				
									562.20	562.20	174	Sqm.	97823.00
4	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.												
	5.16.6 Thermo-Mechanically Treated bars.(TMT)												
	Qty. for steel up to plinth												
		105.77	x	100		Kg. per cum.			10577				
									10577	10577	62.90	Kg.	665293.00
5	Providing and laying in position specified grade of reinforced cement concrete (with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :												
	5.1.1 M 20 -Grade Concrete												
	Col. Footing	2	x	1.5	x	1.5	x	0.6	2.7				
		27	x	1.5	x	1.7	x	0.6	41.31				
		21	x	1.5	x	1.6	x	0.6	30.24				
	Col. RCC	2	x	0.4	x	0.4	x	2	0.64				
		27	x	0.3	x	0.4	x	2	8.1				

S.No.	Description of Item	Qty.	Rate	Unit	Amount
	21 x 0.3 x 0.3 x 2 3.78				
	Plinth beam 1 x 130 x 0.2 x 0.3 7.8				
	1 x 140 x 0.2 x 0.4 11.2				
	105.77	105.77	5091	Cum	538475.00
6	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. (SOR I.No. 2.25) Total Qty. excavation (lt. NO. 1+lt. No.2) 438.37 + 99.63 = 538.002 Deduction base conc. (lt. No. 3) (from No. 68 M upto GL) 57.92 Net Qty. 438.078	438.08	72	Cum	31542.00
7	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming consolidating in layers not exceeding 20cm in depth and dressing complete (SOR I.No. 2.27)				
	General store 1 x 3.2 x 3.5 x 0.50 5.6				
	Md 2 x 3.5 x 4.5 x 0.50 15.75				
	Wall 1 x 3 x 4.5 x 0.50 6.75				
	imm 1 x 3 x 4.5 x 0.50 6.75				
	off & dis 2 x 3 x 3.5 x 0.50 10.5				
	cold chain 1 x 2.3 x 2.4 x 0.50 2.76				
	record 1 x 3.5 x 3.5 x 0.50 6.13				
	ster 1 x 3 x 2.8 x 0.50 4.2				
	labour 1 x 3.9 x 4.2 x 0.50 8.19				
	m of 1 x 3.9 x 4.4 x 0.50 8.58				
	lab 1 x 3 x 3.4 x 0.50 5.1				
	wards 2 x 5.5 x 3.4 x 0.50 18.7				
	N duty 1 x 2.5 x 3.5 x 0.50 4.38				
	ver 1 x 6.8 x 3.5 x 0.50 11.56				
	ent. Lobby 1 x 3.2 x 2.7 x 0.50 4.32				
	Linen 1 x 6 x 4.9 x 0.50 14.7				
	Corridor 1 x 2.5 x 3.5 x 0.50 4.38				
	Toilets 1 x 30 x 1.8 x 0.50 27				
	Nurse duty room 1 x 4.2 x 40 x 0.50 20				
	Corridor 1 x 30 x 3.6 x 0.50 7.56				
	Toilets 1 x 1 x 40 x 0.50 20				
	Nurse duty room 1 x 4.2 x 3.6 x 0.50 7.56				
	217.86	217.86	672	Cum	146402.00
8	Preconstruction antitermite treatment to the building under construction by providing Stage 1: Treating the bottom and the sides (upto 30cm hight of the excavated trench @ 5 litter per sqm of the surface area. Stage 2: After masonry/RCC work, the backfill in the immddiate contact with the foundation structure treatment @ 7.5 litter per sqm. of the vertical surface of the substructure for each side. Stage 3: surface treatment by spreading emulsion over the plinth area before laying the base concrete under floors @ 5.0 litres/Sqm. Stage 4: Pumping the emulsion in plinth masonry on filling side at floor junction @ 7.5 litres/Sqm. Stage 5: Pumping the emulsion from outer side of the plinth below ground around the masonry @ 5.0 litres/Sqm as per I.S. 8944 Emulsion. (1Chlorpyrifos: 19 water) with five years service guarantee (Measurements to be taken for plinth area)				

S.No.	Description of Item							Qty.	Rate	Unit	Amount
	Note – Treatment should start when foundation trenches and pits are ready to take bed concrete or leveling course in foundations. Laying of bed concrete should start when the chemical emulsion has been absorbed by the soil and the surface is reasonably dry. Treatment should not be carried out when it is raining or when soil is wet with rain or subsoil water. This also applies to filled up soil within the plinth area before laying the subgrade for flooring.										
	SOR (2.32)										
	Genral store	1	x	3.2	x	3.5	x		11.2		
	md	2	x	3.5	x	4.5	x		31.5		
	wall	1	x	3	x	4.5	x		13.5		
	imm	1	x	3	x	3.5	x		10.5		
	off & dis	2	x	3	x	3.5	x		21		
	cold chain	1	x	2.3	x	2.4	x		5.52		
]record	1	x	3.5	x	3.5	x		12.25		
	ster	1	x	3	x	2.8	x		8.4		
	labour	1	x	3.9	x	4.2	x		16.38		
	m of	1	x	3.8	x	4.4	x		17.16		
	lab	1	x	3	x	3.4	x		10.2		
	Wards	2	x	5.5	x	3.4	x		37.4		
	N "Duty	1	x	2.5	x	3.5	x		8.75		
	Ver	1	x	6.8	x	3.4	x		23.12		
	Ent.	1	x	3.2	x	2.7	x		8.64		
	Lobby	1	x	6	x	4.9	x		29.4		
	Linen	1	x	2.5	x	3.5	x		8.75		
	Corridor	1	x	27	x	1.8	x		48		
	Toilets	1	x	1	x	40	x		40		
	Nurse duty room	1	x	4.2	x	3.6	x		15.12		
								377.39	377.39	136 Sqm.	51325.00

										Part 1st Total Rs.			1719016.00
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- 1 Centering & Shuttering
Centering and shuttering including strutting, propping etc. and removal of form for :

5.9.3 Suspended floors, roofs, landings, balconies and access platform.

Col.	RCC	2 x	3.1 x	1.6	9.92						
		27 x	3.1 x	1.6	133.92						
		21 x	3.1 x	1.2	78.12						
Litnel		1 x	180 x	0.8	108						
		1 x	55 x	0.8	44						
		4 x	17.2 x	1.16	78.81						
		3 x	5 x	1.16	17.4						
		7 x	4.3 x	1.16	34.92						
		4 x	10.2 x	1.16	47.33						
		4 x	4.8 x	0.96	18.43						
		3 x	3.5 x	1.16	12.18						
		4 x	6.2 x	0.8	23.81						
		3 x	11.5 x	1.18	40.02						
Ramp		1 x	8 x	2.18	17.28						
		1 x	10.5 x	9.9	103.95						
		1 x	17.2 x	10.5	180.6						
		1 x	9.8 x	12.8	122.88						
		1 x	12.8 x	4.3	55.04						
		1 x	40.8 x	0.12	4.9						
		1 x	55.4 x	0.12	6.65						
		1 x	42.8 x	0.12	5.14						
		1 x	34.2 x	0.12	4.1						
Misc					51.61						
					1200	1200	264 Sqm.	316800.00			

- 2 R.C.C. Work

S.No.	Description of Item					Qty.	Rate	Unit	Amount
	Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts etc. above plinth level and up to floor two level excluding cost of centering, shuttering, finishing and reinforcement :								
5.2.1	M 20 –Grade Concrete								
Col.	RCC	2 x	0.4 x	0.4 x	3.1	0.99			
		27 x	0.3 x	0.5 x	3.1	12.56			
		21 x	0.3 x	0.3 x	3.1	5.86			
Lintel		1 x	180 x	0.2 x	0.2	7.2			
Chajja		1 x	55 x	0.8 x	0.2	6.6			
Floor beam		4 x	17.2 x	0.2 x	0.48	6.605			
		3 x	5 x	0.2 x	0.48	1.44			
		7 x	4.3 x	0.2 x	0.48	2.89			
		4 x	10.2 x	0.2 x	0.48	3.197			
		4 x	4.8 x	0.2 x	0.48	1.459			
		3 x	3.5 x	0.2 x	0.48	1.008			
		4 x	6.2 x	0.2 x	0.38	1.885			
		3 x	11.5 x	0.2 x	0.48	3.312			
Ramp		1 x	8 x	1.8 x	0.18	2.592			
Slab		1 x	10.5 x	9.9 x	0.12	12.474			
		1 x	17.2 x	10.5 x	0.12	21.672			
		1 x	9.6 x	12.8 x	0.12	14.746			
		1 x	12.8 x	4.3 x	0.12	6.605			
					113.10	113.10	5202	Cum	588320.00
3	Reinforcement								
	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.								
5.16.6	Thermo-Mechanically Treated bars.(TMT)								
	Quantity for steel								
	upto plinth	113.10	x	100	kg. per cum.	11310.00			
	Quantity as per Item No. 6					11310.00	11310.00	62.90	Kg. 711399.00
4	Brick work								
	Brick work with well brunt open bhatta, bricks, crushing strength not less than 25kg / cm2 and water absorpt ion not more than 20% in superstructure above plinth level and up to floor two level i/c curing etc complete.								
6.6.2	Cement mortar 1:6 (1 cement : 6 sand)								
		4 x	17.3 x	0.2 x	3	41.52			
		4 x	4.5 x	0.2 x	3	10.8			
		8 x	3.5 x	0.2 x	3.1	17.38			
		4 x	9.9 x	0.2 x	3	23.76			
		1 x	4.1 x	0.2 x	3	2.46			
		3 x	3.2 x	0.2 x	3	4.76			
		2 x	8.8 x	0.2 x	3	10.56			
		3 x	5.5 x	0.2 x	3	9.9			
		2 x	2.4 x	0.2 x	3.1	2.98			
		1 x	70 x	0.2 x	0.9	12.6			
	Misc.					14.9			
					A	152.8			
Dedudction	DW1	1 x	3.2 x	0.2 x	2.4	1.54			
	DW2	2 x	1.8 x	0.2 x	2.4	1.73			
	D1	10 x	0.9 x	0.2 x	2.4	4.32			
	D2	3 x	1.2 x	0.2 x	2.4	1.73			
	D2A	2 x	1.2 x	0.2 x	2.4	1.15			
	D6	1 x	0.9 x	0.2 x	2.1	0.38			

S.No.	Description of Item						Qty.	Rate	Unit	Amount
	W	2 x	1.2 x	0.2 x	1.5	0.72				
	W1	18 x	1.5 x	0.2 x	1.6	8.64				
	HW	1 x	0.9 x	0.2 x	1.2	0.22				
	HW1	1 x	2.7 x	0.2 x	1.2	0.65				
	V1	5 x	1.2 x	0.2 x	1	1.2				
	V2	2 x	2 x	0.2 x	1	0.8				
	V3	1 x	1.2 x	0.2 x	0.3	0.07				
						23.14				
	Net Qty.	A-0	152.6	33.14 =		129.46	129.46	4350	Cum	563151.00
5	Providing half brick masonry with well burnt open bhatta bricks crushing strength not less than 25 kg /cm2 and water absorption not more than 20% in superstructure above plinth level and up to floor two level									
6.14.2	Cement mortar 1:4 (1 cement : 4 sand)									
		2 x	3.5 x	3.1	21.7					
		1 x	12.5 x	2.4	30					
		2 x	1.8 x	3.2	11.52					
		3 x	3.9 x	3.1	36.27					
		2 x	2.1 x	3.1	13.02					
		2 x	3 x	3.1	18.6					
	Misc				8.89					
					140					
	D1	4 x	0.9 x	2.4	8.64					
	D2	3 x	1.2 x	2.4	8.64					
	D3	1 x	1 x	2.1	2.1					
	D4	4 x	0.8 x	2.1	6.72					
	D5	3 x	0.8 x	2.1	5.04					
	D6	2 x	0.9 x	2.1	3.78					
	FV	1 x	1.2 x	0.5	0.6					
				B	35.52					
	Net Qty.	A+B	=	140 -	35.52 =	104.48	104.48	522	Sqm.	54539.00
6	Plaster 12 mm thick cement plaster d) in Cement Mortar 1:6 (1 cement : 6 sand) (SOR I.No. 13.1.2)									
	General store	1 x	13.4 x	3.48	46.53					
	md	2 x	16 x	3.48	111.36					
	wall	1 x	15 x	3.48	42.2					
	imm	1 x	13 x	3.48	45.24					
	off &dis	2 x	13 x	3.48	90.48					
	cold chain	1 x	9.4 x	3.48	32.71					
	record	1 x	14 x	3.48	48.72					
	ster	1 x	11.6 x	3.48	40.37					
	labour	1 x	16.2 x	3.48	56.38					
	m of	1 x	16.6 x	3.48	57.77					
	lab	1 x	12.6 x	3.48	44.54					
	Wards	2 x	17.8 x	3.48	123.89					
	N Duty	1 x	12 x	3.48	41.76					
	Ver	1 x	20.4 x	3.48	70.99					
	Ent	1 x	11.8 x	3.48	41.06					
	Lobby	1 x	21.8 x	3.48	75.86					
	Linen	1 x	12 x	3.48	41.76					
	Corridor	1 x	54 x	3.48	187.92					
	Nurse duty room	1 x	12 x	3.48	54.29					
	Misc.	1 x	15.6 x	3.48	36.06					
					1300					
	Ded	DW1	1 x	3.2 x	2.4	7.68				
		DW2	2 x	1.8 x	2.4	8.64				
		D1	14 x	0.9 x	2.4	30.24				
		D2	3 x	1.2 x	2.4	8.64				
		D2A	2 x	1.2 x	2.4	5.76				
		D3	1 x	1 x	2.1	2.1				

S.No.	Description of Item					Qty.	Rate	Unit	Amount
	D4	4 x	0.8 x	2.1	6.72				
	D5	3 x	0.8 x	2.1	5.04				
	D6	3 x	1.2 x	2.1	5.67				
	W	2 x	1.5 x	1.5	3.6				
	W1	18 x	0.9 x	1.6	43.2				
	HW	1 x	2.7 x	1.2	1.08				
	HW 1	1 x	1.2 x	1.2	3.24				
	V1	5 x	2 x	1	6				
	V2	2 x	1.2 x	1	4				
	V3	1 x	1.2 x	0.3	0.36				
	FV	1 x	1.2 x	0.5	0.6				
					142.57				
	Net Qty. A-B		142.57 =		1157.43	1157.43		110 Sqm.	127317.00
7	20 mm cement plaster of mix								
	13.3.2	1:6 (1 cement : 6 sand)							
	toilet wall	1 x	9 x	5.6	50.4				
		1 x	22 x	5.6	123.2				
		2 x	10.5 x	5.6	117.6				
		1 x	27.2 x	5.6	152.32				
					443.52	443.52		156 Cum	69189.00
8	6 mm cement plaster of mix :								
	13.8.1	1:3 (1 cement : 3 sand)							
	General store	1 x	3.2 x	3.5	11.2				
	md	2 x	3.5 x	4.5	31.5				
	wall	1 x	3 x	4.5	13.5				
	imm	1 x	3 x	3.5	10.5				
	loff & dis	2 x	3 x	3.5	21				
	cold chain	1 x	2.3 x	2.4	5.52				
	record	1 x	3.5 x	3.5	12.25				
	ster	1 x	3 x	2.8	8.4				
	labour	1 x	3.9 x	4.2	16.38				
	m ot	1 x	3.9 x	4.4	17.16				
	lab	2 x	3 x	3.4	10.2				
	Wards	1 x	5.5 x	3.4	37.4				
	N Duty	1 x	2.5 x	3.5	8.75				
	Ver	1 x	6.8 x	3.4	23.12				
	Ent	1 x	3.2 x	2.7	8.64				
	Lobby	1 x	6 x	4.9	20.4				
	Linen	1 x	2.5 x	3.5	8.75				
	Corridor	1 x	30 x	1.5	54				
	Toilets	1 x	1 x	40	40				
	Nurse duty room	1 x	4.2 x	3.5	15.12				
	Chajja	1 x	55 x	0.8	44				
	Misc.				17.21				
					444	444		96 Sqm.	42624.00
9	Flooring								
	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (having thickness 6 to 7mm) of approved make in all Colours shades, such as burgundy, Bottle green, Black of size 300x450mm or more in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete. (SOR 11.48)								
	DADO								
	General store	1 x	13.4 x	1.5	20.1				
	md	2 x	16 x	1.5	48				
	wall	1 x	15 x	1.5	22.5				
	imm	1 x	13 x	1.5	19.5				
	off & dis	2 x	13 x	1.5	39				
	cold chain	1 x	9.4 x	1.5	14.1				

S.No.	Description of Item			Qty.	Rate	Unit	Amount
	record	1 x	14 x	3.48		21	
	ster	1 x	11.6 x	3.48		40.37	
	laobur	1 x	16.2 x	3.48		56.38	
	m of	1 x	16.6 x	1.5		57.77	
	lab	1 x	12.8 x	1.5		19.2	
	wards	2 x	17.8 x	1.5		53.4	
	N. duty	1 x	12 x	1.5		18	
	Ver	1 x	20.4 x	1.5		30	
	Ent	1 x	11.8 x	1.5		17.7	
	Lobby	1 x	21.8 x	1.5		32.7	
	Linen	1 x	12 x	1.5		18	
	Corridor	1 x	54 x	1.5		81	
	Nurse duty room	1 x	15.6 x	1.5		23.4	
						632.71	
	Ded						
	D1	1 x	0.9 x	2.4		2.16	
	D1	13 x	0.9 x	1.5		17.55	
	D2	3 x	1.2 x	2.4		8.64	
	D2A	2 x	1.2 x	2.4		5.76	
	D3	1 x	1 x	2.1		2.1	
	D4	4 x	0.8 x	2.1		6.72	
	D5	3 x	0.8 x	2.1		5.04	
	D6	3 x	0.9 x	2.1		5.67	
	W	2 x	1.2 x	1.5		3.8	
	W1	2 x	1.5 x	1.5		7.2	
	W1	3 x	1.5 x	1.5		33.75	
	HW	15 x	0.9 x	0.3		0.27	
	HW1	1 x	2.7 x	0.3		0.81	
	V1	1 x	1.2 x	1		6	
	V2	5 x	2 x	1		4	
	V3	2 x	1.2 x	0.3		0.36	
	FV	1 x	1.2 x	0.5		0.8	
	Net Qty. = A + B			632.71 - 110.2	533.48	522.482	937 Sqm. 489566.00
10	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete.						
	11.53.2 Size of Tile 600x600x9-10 mm						
	General Store						
	md	1 x	3.2 x	3.5		11.2	
	wait	2 x	3.5 x	4.5		31.5	
	imm	1 x	3 x	4.5		13.5	
	off & dis	1 x	3 x	3.5		10.5	
	cold chain	2 x	2.3 x	3.5		21	
	record	1 x	3.5 x	2.4		5.52	
	lab	1 x	3 x	3.5		12.25	
	WARDS	1 x	5.5 x	3.4		10.2	
	N. Duty	2 x	2.5 x	3.4		37.4	
	Ver	1 x	6.8 x	3.5		8.75	
	Ent.	1 x	3.2 x	3.4		23.12	
	Lobby	1 x	6 x	2.7		8.64	
	Linen	1 x	2.5 x	4.9		29.4	
	Corridor	1 x	30 x	3.5		8.75	
	Toilets	1 x	1 x	1.8		54	
	Nurse duty room	1 x	4.2 x	40		40	
	Sil & Jambs	1 x	40 x	3.6		15.12	
	Labour	1 x	3.9 x	4.2		16.38	
	m of	1 x	3.9 x	4.4		17.16	
						374.39	
					374.39	374.39	894 Sqm. 334705.00

S.No.	Description of Item	Qty.	Rate	Unit	Amount
11	Providing and laying gang saw cut 18 mm thick, mirror polished pre moulded (wherever required) and pre polished machine cut granite stone of required size and shape of approved shade, colour and texture in flooring laid over 20mm thick base of cement mortar 1:4 (1cement : 4 sand) including grouting the joints with white cement mixed with matching pigment, epoxy touch ups etc. complete as per direction of Engineer-in-Charge. (SOR I.No. 11.29.1.2)				
11.29.1.2	Area of slab more than 0.50 sqm.				
	1 x 3.2 x 2.7	8.64			
		8.64	8.64	3720 Sqm	32141.00
12	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction, of approved size, design and shape, laid in required colour and pattern over and including 50mm thick compacted bed of stone dust, filling the joints with sand etc. all complete as per the direction of Engineer-in-charge. (SOR I.No. 11.75)				
	Entry 1 x 6.8 x 3.5	23.8			
	Plinth protection 1 x 4.3 x 4	17.2			
	1 x 76 x 1.2	91.2			
	A	132.2	132.3	586 Sqm	77528.00
	Water Proofing				
13	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around.(SOR no. 22.6)				
	Salb terrace	440	440	338 Sqm.	148720.00
	Door & Window				
14	Providing and fixing aluminium handles 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:				
9.113.2	100 mm	12	55	Each	660.00
15	Providing and fixing aluminium handles 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:				
9.113.2	100 mm	100	55	Each	5500.00

S.No.	Description of Item	Qty.	Rate	Unit	Amount
16	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked for doors including cost of cutting floors as required embedding in floors and cover plates with brass pivot and single piece M.S. sheet with stainless steel cover plate.	6	2012	Each	12072.00
17	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 :				
9.110.2	250x10 mm				
B	250 x 10 mm	60.00	102	Each	6120.00
18	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) :				
21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)				
	DW1	1 x	11.2		11.2
	DW2	2 x	8.4		16.8
	FV	1 x	3.4		3.4
	HW1	1 x	4.2		4.2
	HW2	1 x	7.8		7.8
	D1	14 x	5.7		79.8
	D2	3 x	6		18
	D2A	2 x	6		12
	D3	1 x	5.2		5.2
	D4	4 x	5		20
	D5	3 x	5		15
	D6	3 x	5.1		15.3
	W1	2 x	5		10
	W2	18 x	6		108
	V1	5 x	4.4		22
	V2	2 x	6		12
	V3	1 x	3		3
		363.7	546	377 Kg.	205842.00
19	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				
	DW1	1 x	3.2 x	2.4	7.68
	DW2	2 x	1.8 x	2.4	8.64
	FV	1 x	1.2 x	0.5	0.6
	HW1	1 x	0.9 x	1.2	1.08
	HW2	1 x	2.7 x	1.2	3.24
	W1	2 x	0.9 x	1.6	2.88
	W2	18 x	1.5 x	1.6	43.2
	V1	5 x	1.2 x	1	6
	V2	2 x	2 x	1	4
	V3	1 x	1.2 x	0.3	0.36

S.No.	Description of Item	Qty.	Rate	Unit	Amount
		77.68	77.68	932 Sqm.	72398.00
20	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters of such as duro board, century or equivalent make.				
9.19.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.				
	D1 14 x 0.9 x 2.4	30.24			
	D2 3 x 1.2 x 2.4	8.64			
	D2A 2 x 1.2 x 2.4	5.76			
	D3 1 x 1 x 2.1	2.1			
	D4 4 x 0.8 x 2.1	6.72			
	D5 3 x 0.8 x 2.1	5.04			
	D6 3 x 0.9 x 2.1	5.67			
		64.17	64.17	2237.00 Sqm.	143548.00
21	Providing and fixing aluminium sliding door 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 nuts and screws etc. complete :				
9.109.1	300x16 mm	60	60	241 Each	14460.00
22	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
9.43.1	Fixed to steel windows by welding.				
	WARD GRILL	400			
	W 2 x 1.2 x 1.5	3.6			
	W1 18 x 1.5 x 1.6	43.2			
	V1 5 x 1.2 x 1	6			
	V2 2 x 2 x 1	4			
	V3 1 x 1.2 x 0.3	0.36			
	B	57.16			
		514.32	514.32	91 Kg.	46803.00
	Finishing (Distemping & Painting)				
23	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
13.46.1	Water thinnable cement primer.				
	Quantity from Item No. 5.1, 5.2, 5.3	1528	1528	24 Sqm.	36672.00
24	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work (SOR I.No. 13.49.1)				
	Quantity from Item No. 5.3	1528	1528	64 sqm.	97792.00
25	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, Like birla white /JK white or equivalent, over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. (SOR I.No. 13.41/P-106)				
		1084	1084	74 Sqm.	80216.00
	Finishing walls with textured exterior paint of required shade :				

[illegible]

**Executive Engineer
Directorate of
Health Services Bhopal**

SANITARY WORKS

(A) SANITARY WORKS

S.No.	ITEM	Qty.	Unit	Rate	AMOUNT
	(i) PWD SOR Based Items				
1	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 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 (SOR I.No. 18.49)	10000	Ltr.	7	70000.00
2	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work – Exposed on wall.				
	a) 15 mm dia. nominal bore	40	RM	211	8440.00
	b) 20 mm dia. nominal bore	60	RM	255	15300.00
	c) 25 mm dia. nominal bore	70	RM	300	21000.00
	d) 32 mm dia. nominal bore	50	RM	361	18050.00
	e) 50 mm dia. nominal bore (SOR I.No. 18.10/P-153)	50	RM	596	29800.00
3	Providing and laying below ground unplasticised PVC pipe to with stand working pressure of 4 kg/cm ² soild waste pipes confirming to IS:13592 and IS:4985 including jointing with seal ring confirming to IS :5282 leaving 10mm gap for thermal expansion all necessary fittings etc. complete. Excavation to be paid seperately.				
	19.4.1 110 mm diameter OD	40	RM	234	9360.00
	19.4.2 160 mm diameter OD	20	RM	477	9540.00
4	Providing and laying cement concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20 mm nominal size) all-round PVC. pipes including bed concrete as per standard design:				
	19.5.1 110 mm diameter PVC. Pipe	30	RM	576	17280.00
	19.5.2 160 mm diameter PVC pipe (SOR I.No. 19.36.1/P-118)	20	RM	704	14080.00
5	Providing and laying below ground unplasticised PVC pipe to with stand working pressure of 4 kg/cm ² soild waste pipes confirming to IS:13592 and IS:4985 including jointing with seal ring confirming to IS :5282 leaving 10mm gap for thermal expansion all necessary fittings etc. complete. Excavation to be paid seperately.				
	19.4.1 110 mm diameter OD	48	RM	234	11232.00
6	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 :				

S.No.	ITEM	Qty.	Unit	Rate	AMOUNT
	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests. (SOR I.No. 17.1.1)	3	Each	2995	8985.00
7	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern and C.P. flush bend with fittings and C.I.brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
	17.3.1 W.C. pan with ISI marked white solid plastic seat and lid.	3	Each	4613	13839.00
8	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 :				
	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap. (SOR I.NO. 17.11.2)	6	Each	2187	13122.00
9	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required : Kitchen sink with drain board 510x1040 mm bowl depth 250mm. (SOR I.No. 17.14.1.2)	1	Each	7609	7609.00
10	Providing and fixing PTMT Bottle Trap for Wash basin and sink. Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260gms. (SOR I.No. 17.80)	6	Each	499	2994.00
11	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Rectangular shape 1500x450 mm (SOR I.No. 17.68.4)	6	Each	1311	7866.00
12	Providing and fixing toilet paper holder : C.P. brass (SOR I.No. 17.70.1)	3	Each	340	1020.00

S.No.	ITEM	Qty.	Unit	Rate	AMOUNT
13	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour. weighing not less than 105 gms. (SOR I.No. 17.81)	6	Each	217	1302.00
14	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. 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms. (SOR I.No. 17.83.2)	6	Each	459	2754.00
15	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 15 mm nominal bore. (SOR I.No. 18.52.1)	12	Each	458	5496.00
16	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm nominal bore. (SOR I.NO. 18.55.1/P-161)	12	Each	778	9336.00
17	Providing and fixing gun metal gate valve with brass lever handle of approved quality. 25 mm nominal bore 32 mm nominal bore. 50 mm nominal bore (SOR I.No. 18.33)	2 2 2	Each Each each	341 419 639	682.00 838.00 1278.00
18	Providing and fixing PTMT swivelling shower, 15mm nominal bore. Weighing not less than 40gms. (SOR I.No. 18.71)	6	Each	164	984.00
19	Providing and fixing square-mouth S.W. gully trap class SP1 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 : 19.7.3 180x150 mm size P type 19.73.1 With well burnt bricks	6	Each	1913	11478.00
20	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5kg. (SOR I.No. 19.22)	6	Each	274	1644.00

S.No.	ITEM	Qty.	Unit	Rate	AMOUNT
21	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement :2 sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement :5 sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :	6	Each	916	5496.00
	18.39.1 With common burnt clay bricks of 25 kg /sqcm compressive strength.				
22	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 sand) R.C.C. top slab with Cement Concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				
	19.9.1.2 With Sewer bricks conforming to IS : 4885	4	Each	7747	30988.00
23	Constructing masonry Chamber 60x60x75 cm, inside in brick work in cement mortar 1:4 (1 cement : 4 sand) for fire hydrants, with C.I. surface box 350x350 mm. top and 165 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :				
	With common burnt clay bricks of 25 kg /sqcm compressive strength. With Modular bricks (SOR I.No. 18.41.1)	6	Each	5168	31008.00
24	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
	19.30.1 With well burnt bricks	1	Each	20609	20609.00
				Total :	403410.00

ESTIMATE FOR ELECTRICAL WORKS.					
S.No.	Item	Unit	Rate	Quantity	Amount
	P.W.D. S.O.R. BASED ITEMS				
1	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-				
A	<u>Light Point/Fan Points.</u>				
	a) Short point	Each	394	24	9456.00
	b) Medium point	Each	671	44	29524.00
	c) Long point	Each	1083	65	70395.00
B	<u>3 Pin 6 Amp socket outlet on Separate Board</u>				
	c) Long point	Each	1192	35	41720.00
	Call Bell / Buzzer Points				
	c) Long point	Each	983	1	983.00
2	Point wiring (excluding metallic switch box & sheet but including switches, sockets) for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board .	Each	285	30	8550.00
3	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel conduit of ISI marked suitable size including painting etc. as required as per specification				
	a) 2x2.5 Sq.mm.	meter	117	96	11232.00
	b) 4x2.5 Sq.mm.	meter	176	70	12320.00
	c) 6x2.5 Sq.mm.	meter	225	75	16875.00
	d) 8x2.5 Sq.mm.	meter	277	98	27146.00
4	Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid P.V.C Conduit (HMS) ISI Marked of suitable size etc. with 16 Amp. F.T. Switch & Socket / S.S.Combined 6/16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for				
	C. Long Point	Each	1930	6	11580.00
	D. Extra Long –I	Each	2643	6	15858.00
	E. Extra Long –II	Each	3417	8	27336.00
	F. Extra Long –III	Each	4193	8	33544.00
	Same board switch socket 6/16 Amp	Each	468	10	4680.00

S.No.	Item	Unit	Rate	Quantity	Amount
5	Supplying and fixing PVC conduit ISI marked along with the accessories in concealed system etc. as required				
	PVC . Conduit 20 mm (HMS)	Metre	61	80	4880.00
	PVC . Conduit 25 mm (HMS)	Metre	72	60	4320.00
6	Supplying and fixing of approved make modular type P.V.C. box with modular base and cover plate including fixing on surface excluding switch,socket etc. as required for:-				
	1 OR 2 Module	Each	156	12	1872.00
	3 Module	Each	208	50	10400.00
	8 / 9 Module	Each	400	12	4800.00
	12 Module	Each	487	20	9740.00
7	Supplying and drawing single core PVC insulated cable FR with copper multi strand conductor ISI marked in existing rigid PVC Casing-N-Capping / conduit in surface or concealed as per specification.				
	1 X 2.5 sq mm				
	(a) 1 X 2.5 sq mm	Per Mtr	30	300	9000.00
	1 X 6.00 sq mm				
	(a) 1 X 6.00 sq mm	Per Mtr	58	100	5800.00
8	Supplying of approved make, powder coated Metal Double Door Vertical TPN MCB DB IP 43 protection with provision for MCCB up to 160A TP/ FP 36kA as incomer and space for SP/TP MCBs as outgoing (without MCCB / MCBs) inclusive of bus bar & connections etc				
	4 way without MCCB	Each	8521	3	25563.00
	8 way without MCCB	Each	10815	3	32445.00
9	Supplying of ISI Marked and approved make of Moulded Case Circuit Breaker (MCCB) suitable for 3 phase,3 pole, 50 Hz, 415 Volts, AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS – 8828				
	MCCB with Breaking Capacity 25 KA at 415 V				
	Current Rating -25 to100 Amps & 80% -100% adjustable	Each	5601	4	22404.00
10	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle , 10 kA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :-				
	SINGLE POLE (SP)				
	6 Amp to 32 Amp Rating	Each	205	80	16400.00
	FOR TRIPLE POLE (TP)				
	50 Amp to 63 Amp Rating	Each	1527	10	15270.00

S.No.	Item	Unit	Rate	Quantity	Amount
11	Wiring for sub-mains with PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid PVC conduit (MMS) ISI marked of suitable size(Conduit included) including 2mm thick accessories, connection etc ,as required as per specification				
	4 WIRE SUB-MAIN				
	6.0 sq mm cable in 25 mm conduit	Metre	240	100	24000.00
	10.0 sq mm cable in 32 mm conduit	Metre	367	50	18350.00
12	Supply of XLPE Insulated power cable (confirming IS-7098 Part-I) 1100 Volt grade, 1 core /2 core /3½ core/4 core ISI MARKED with Alu. Stranded /solid conductor				
	3½ CORE UNARMoured				
	70 Sq.mm	Metre	477	90	42930.00
13	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, Rubber ring complete erected with cable and lead connection etc. as per specification complete.				
	Gland size 32mm for 2/3, 3½, 4 x 25 Sq.mm				
	OR 2/3, 3½ x 35 Sq.mm OR 2/3 x 50 Sq.mm.	Each	80	75	6000.00
14	Supplying and fixing cramping type Alum. lugs as per I.S.S.				
	Specification suitable for following size of cable with Alu. /Copper solid/stranded conductor evenly cramped with high/pressure tool and connected to switch gear/Bus/M.C.C.B./ M.C.B. etc. as required complete.				
	35 Sq.mm	Each	5	6	30.00
	70 Sq.mm	Each	11	10	110.00
15	Supplying & fixing pin terminal lugs as per ISS specification suitable for cable evenly cramped with high pressure tool & connection to switch gear terminal.				
	Copper Lugs Pin Type				
	Up to 16 Sq.mm2 Conductor Size	Each	17	180	3060.00
16	Supplying & fixing of ISI marked Porcelain Rewireable type fuse carrier & base unit of approved make & confirming to IS: 2086-1993				
	100 Amps /415 Volts	Each	609	10	6090.00
17	Supplying of ISI Marked Change over switches in sheet enclosure confirming to IS : 4064 / IS : 13947 (part I & III) with side handle operated 4 pole with two earthing terminals				
	100 Amps. 415/500 Volts.(off load)	Each	9547	5	47735.00

S.No.	Item	Unit	Rate	Quantity	Amount
18	Supplying, fixing & testing of approved make T- 5 lamp channel luminary with epoxy white powder coated CRCA sheet steel housing box type channel with reflector cover including electronic ballast (HF), PF > 0.95, THD <30% complete duly wired (with tube rod) as per specification & fixing as below:				
	l) Fixing on wall/Ceiling on PVC plate Anchor fasteners and other necessary materials including connections etc. and as required.	Each	1172	75	87900.00
19	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS :374/1979 with up to date ammendments.				
	Ceiling Fan (5 star & ISI)-1200 mm Sweep	Each	2276	20	45520.00
20	Supplying and fixing of approved make electronic dimmer / regulator including connection etc. as required on existing board				
	450 Watt	Each	228	20	4560.00
21	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked BC / ES cap of approved make as required as per specification				
	15 Watt	Each	194	20	3880.00
22	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished of approved as required.				
	300mm sweep 900 RPM	Each	2918	10	29180.00
23	Earthing with Copper Earth plate 600mm X 600mm X 3mm thick including accessories and providing masonary encloser in cement mortor, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 Metre long etc. (but without charcoal or coke and salt) complete as required.	Each	8013	5	40065.00
24	Add Extra for using salt and charcoal / coke for G.I. Plate or Copper plate earth electrode as required including excavation & refilling.	Each	1841	6	11046.00
25	Providing & fixing 25mm X 5mm copper strip in 40mm dia G.I.pipe (B class) from earth electrode as required.	metre	1043	45	46935.00
	TOTAL AMOUNT				901484.00
	Add Extra for External Electrification Works				20000.00
	TOTAL AMOUNT				921484.00

DETAILED ESTIMATE FOR G-TYPE QUARTER

CIVIL WORKS

No.	SOR Item No	Item	MEASURMENT						Rate	Amount
			No.	L	W	D/H	Qty	Unit		
1	2	3	4	5	6	7	8	9	10	11
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) 2.6.1								
	2.6.1	All kinds of soil.								
		Column C1	12	1.50	1.50	2.10	56.70			
			2	1.50	1.50	2.10	9.45			
		For Plinth Protection Wall	1	36.50	0.30	0.30	3.29			
		For Septic tank	1	3.50	2.50	1.20	10.50			
							79.94	Cum.	129	10312.00
2	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 :								
	4.1.2	With 40mm nominal size graded stone aggregate.								
	4.1.2.1	M 15 - Grade concrete								
		Footing Base	12	1.50	1.50	0.15	4.05			
			2	1.50	1.50	0.15	0.68			
		For Base of Rooms								
		Varanda	1	3.30	1.50	0.10	0.50			
		Living Room	1	3.40	3.40	0.10	1.16			
		Bed Room	1	3.40	3.30	0.10	1.12			
		Bed Room	1	3.40	3.55	0.10	1.21			
		Toilet	1	2.10	1.50	0.10	0.32			
		Almira portion	1	0.50	0.55	0.10	0.03			
		Dining hall/Multipurpose room	1	3.07	3.25	0.10	1.00			
		Kitchen	1	3.10	2.00	0.10	0.62			
		Bath	1	1.20	1.50	0.10	0.18			
		W.C	1	0.90	1.25	0.10	0.11			
		gali	1	0.90	1.10	0.10	0.10			
		For Plinth Protection Wall	1	26.50	0.30	0.10	0.80			
		For Septic tank	1	3.50	2.50	0.15	1.31			
							13.16	Cum.	4403.00	57962.00
3	5.1	Providing and laying in position specified grade of reinforced cement concrete (with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :Providing and laying in position specified grade of reinforced cement								
	5.1.1	M 20 -Grade Concrete								
		D1	12	1.30	1.30	0.40	8.11			
			2	1.20	1.20	0.40	1.15			
		Col. Up to PB botom	12	0.30	0.50	1.60	2.88			
			2	0.30	0.30	1.60	0.29			
		Net PB Length	1	65.00	0.20	0.40	5.20			
		Curtain Wall	1	36.50	0.10	0.60	2.19			
		For Septik tank	1	3.50	2.50	0.15	1.31			
		Plinth slab	1	10.75	7.90	0.10	8.49			
							29.63	Cum	5091	150831.00

4	5.2	Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts etc. above plinth level and up to floor two level excluding cost of centering, shuttering, finishing and reinforcement :									
	5.2.1	M 20 –Grade Concrete									
		Col. Up to Slab Bottom	12	0.30	0.50	2.67	4.81				
			2	0.30	0.30	2.67	0.48				
		S.B.	1	68.00	0.20	0.48	6.53				
		T.B.	2	3.60	0.30	0.48	1.04				
			2	3.40	0.40	0.48	1.31				
		Slab	1	10.75	7.90	0.12	10.19				
							24.35	Cum	5202	126658.00	
5	4.17	Making plinth protection 50mm thick of cement concrete grade M10 over 75mm bed of dry metal ballast 40mm nominal size well rammed and consolidated and filled with sand including finishing the top smooth (with 20mm nominal size graded stone aggregate.)									
		For Plinth Protection	1	36.70		1.00	36.70	sqm	351.00	12882.00	
6	5.3	Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in beams, suspended floors, roofs having slope of any degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level and up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement in concrete grade.									
	5.3.1	M 20 –Grade Concrete									
		L.B.	1	65.40	0.20	0.20	2.62				
		Chajja	1	5.60	0.60	0.08	0.27				
							2.88	cum	5284.00	15243.00	
7	5.16	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.									
	5.16.6	Thermo-Mechanically Treated bars.(TMT)									
		RCC					56.86				
		Steel= RCC Qty X 100 Kg/Cum of concrete for Estimate Purpose					5686.00	Kg	62.90	357649.00	
8	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :									
A	5.9.1	Foundations, footings, bases of columns, etc. for concrete up to plinth level.									
		Footing	12	6.00		0.40	28.80				
			2	5.40		0.40	4.32				
		Col. Up to PB Botom	12	1.40		1.60	26.88				
			2	1.20		1.60	3.84				
							63.84	sqm	174.00	11108.00	
B	5.9.2	Walls (any thickness) including attached pilasters butteresses, plinth beams and string courses etc.up to plinth level.									
		Net PB Length	1	116.20		0.40	46.48				
			1	58.10		0.10	5.81				
		Col. Up to PB Botom	1	36.50		1.30	47.45				
							99.74	sqm	267.00	26631.00	
C	5.9.3	Suspended floors, roofs, landings, balconies and access platform.									
		Columns, Pillars, Posts and Struts Walls in super structure.									
		Col. Up to Slab Botom	12	1.60		2.67	51.26				
			2	1.20		2.67	6.41				
		L.B.	1	72.90		0.20	14.58				

		T.B.	1	76.50		0.48	36.72			
			1	3.60		0.48	1.73			
		Chajja	4	3.40		0.48	6.53			
		Sides	1	5.60		0.60	3.36			
		Slab	1	11.20		0.08	0.90			
		Sides	1	11.00	8.10		89.10			
			1	42.42		0.12	5.09			
							215.67	sqm	264.00	56938.00
9	2.27	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming consolidating in layers not exceeding 20cm in depth and dressing complete								
		Varanda	1	10.75	7.90	0.20	16.99			
			1	3.30	1.50	0.20	-0.99			
							16.00	Cum.	672.00	10749.00
10	2.28	Supplying and filling in plinth with hard muram/hard copra under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.								
		Varanda	1	7.82	6.50	0.60	30.50			
			1	3.30	1.50	0.60	2.97			
			1	1.65	3.40	0.60	3.37			
							36.83	Cum.	471.00	17349.00
11	2.25	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Q							
		Total Excavation in all Soil					79.94			
		Total Base Conc of Footing					-4.73			
		Total M-20 Footing					-9.26			
		Total M-20, Col up to GL					-3.17			
							62.78	Cum.	72.00	4520.00
12	6.5	Brick work with well brunt open bhatta, bricks, crushing strength not less than 25kg /cm2 and water absorpt ion not more than 20% in foundation and plinth i/c curing etc complete.								
	6.5.2	Cement Mortar 1:6 (1 cement : 6 sand).								
		Ver. Side Wall	1	1.50	0.20	0.80	0.24			
		living Room Wall	1	3.30	0.20	2.67	1.76			
		D	1	1.00	0.20	2.10	-0.42			
		W1	1	1.50	0.20	1.50	-0.45			
		living Room Wall	2	3.40	0.20	2.67	3.63			
		Kitchen Wall	1	3.10	0.20	2.67	1.66			
		Kitchen Wall	1	2.90	0.20	2.67	1.55			
		W	1	1.20	0.20	1.50	-0.36			
		D	1	1.00	0.20	2.10	-0.42			
		W3	1	0.60	0.20	1.50	-0.18			
		w.c. Wall	1	0.90	0.20	2.67	0.48			
		w.c. Wall	1	1.00	0.20	2.67	0.53			
		V	1	0.60	0.20	1.50	-0.18			
		bath wall	1	1.20	0.20	2.67	0.64			
		bath wall	1	1.50	0.20	2.67	0.80			
		V	1	0.60	0.20	1.50	-0.18			
		bath wall	1	1.60	0.20	2.67	0.85			
		Bed room Wall	1	4.10	0.20	2.67	2.19			
		Bed Room Wall	1	5.40	0.20	2.67	2.88			
		V	1	0.60	0.20	1.50	-0.18			
		Bed Room Wall	1	1.10	0.20	2.67	0.59			
		Bed Room Wall	1	3.55	0.20	2.67	1.90			
							17.33	cum	4155.00	72024.00

13		Providing half brick masonry with well burnt open bhatta bricks crushing strength not less than 25 kg /cm2 and water absorption not more than 20% in superstructure above plinth level and up to floor two level										
	6.14											
	6.14.2	Cement mortar 1:4 (1 cement :4 sand)										
		living Room+Bedroom Wall	1	3.30	2.67	8.81						
		Kitchen Room+m.p. room Wall	1	3.10	2.67	8.28						
		w.c. wall	1	0.90	2.67	2.40						
		D2 (tiol)	1	0.90	2.10	-3.78						
		Bed Room+m.p. room wall	1	3.40	2.67	9.08						
		D2 (tiol)	1	1.20	2.10	2.52						
		living Room+kitchen room Wall	1	3.40	2.67	9.08						
		OPEN	1	1.40	2.10	-5.88						
		Bed Room+c.b wall	1	3.40	2.67	9.08						
		D	1	1.20	2.10	-5.04						
		Toilet Room + Bed room	1	2.10	2.67	5.61						
		w.c. wall	1	1.25	2.67	3.34						
		bath wall	1	1.50	2.67	4.01						
		D	1	0.80	1.50	-2.40						
						45.09	sqm		522		23539.00	
14	13.1	12 mm thick cement plaster										
	13.1.2	Cement Mortar 1:6 (1 cement : 6 sand)										
		Ver. Side Wall	2	1.50	3.15	9.45						
		living Room wall	1	3.30	3.15	10.40						
		D	1	1.00	2.10	-2.10						
		W1	1	1.50	1.50	-2.25						
		living Room wall	1	3.40	3.15	10.71						
		Kitchen Wall	1	3.10	3.15	9.77						
		Kitchen Wall	1	2.90	3.15	9.14						
		W	1	1.20	1.50	-1.80						
		D	1	1.00	2.10	-2.10						
		W3	1	0.60	1.50	-0.90						
		w.c. wall	1	0.90	3.15	2.84						
		w.c. wall	1	1.00	3.15	3.15						
		v	1	0.60	0.60	-0.36						
		bath wall	1	1.20	3.15	3.78						
		bath wall	1	1.50	3.15	4.73						
		V	1	0.60	0.60	-0.36						
		bath wall	1	1.60	3.15	5.04						
		Bed Room Wall	1	4.10	3.15	12.92						
		W2	1	1.10	1.50	-1.65						
		Bed Room Wall	1	5.40	3.15	17.01						
		V	1	0.60	0.60	-0.36						
		Bed Room Wall	1	1.10	3.15	3.47						
		W2	1	1.10	1.20	-1.32						
		Bed Room Wall	1	3.55	3.15	11.18						
		W2	1	1.10	1.20	-1.32						
		living Room+Bed Room Wall	1	3.30	2.67	8.81						
		Kitchen Room+M.P. Room wall	1	3.10	2.67	8.28						
		Open	1	0.90	2.67	2.40						
		Bed Room + Kitchen Room Wall	1	0.90	2.10	-1.89						
		Open	1	3.40	2.67	9.08						
		D	1	1.20	2.10	2.52						
		Living Room + Kitchen Roo Wall	1	3.40	2.67	9.08						
		Open	1	1.40	2.10	-2.94						
		Bed room+c.B wall	1	3.40	2.67	9.08						
		D	1	1.20	2.10	-2.52						
		Toilet Room + Bed room Wall	1	2.10	2.67	5.61						
		w.c. wall	1	1.25	2.67	3.34						
		bath wall	1	1.50	2.67	4.01						
		D	1	0.80	1.50	-1.20						
		living Room+Bedroom wall	1	3.30	2.67	8.81						
		Kitchen +m.p. room wall	1	3.10	2.67	8.28						
		w.c. wall	1	0.90	2.67	2.40						

		D2(Toil)	1	0.90		2.10	-1.89			
		Bed Room +m.p. room Wall	1	3.40		2.67	9.08			
		D	1	1.20		2.10	2.52			
		living room+ Kitchen room Wall	1	3.40		2.67	9.08			
		Open	1	1.40		2.10	-2.94			
		Bed room+m.p.room+Bedroom wall	1	3.40		2.67	9.08			
		D	1	1.20		2.10	-2.52			
		Toilet room+Bedroom wall	1	2.10		2.67	5.61			
		w.c. wall	1	1.25		2.67	3.34			
		bath wall	1	1.50		2.67	4.01			
		D	1	0.80		1.50	-1.20			
							206.33	sqm	110	22696.00
15	13.3	20 mm cement plaster of mix :								
	13.3.2	1:6 (1 cement: 6 sand)								
		Ver. Side Wall	2	1.50		5.40	16.20			
		living Room wall	1	3.30		5.40	17.82			
		D	1	1.00		2.10	-2.10			
		W1	1	1.50		1.50	-2.25			
		living Room wall	1	3.40		5.40	18.36			
		Kitchen Wall	1	3.10		5.40	16.74			
		Kitchen Wall	1	2.90		5.40	15.66			
		W	1	1.20		1.50	-1.80			
		D	1	1.00		2.10	-2.10			
		W3	1	0.60		1.50	-0.90			
		w.c. wall	1	0.90		5.40	4.86			
		w.c. wall	1	1.00		5.40	5.40			
		v	1	0.60		0.60	-0.36			
		bath wall	1	1.20		5.40	6.48			
		bath wall	1	1.50		5.40	8.10			
		V	1	0.60		0.60	-0.36			
		bath wall	1	1.60		5.40	8.64			
		Bed Room wall	1	4.10		5.40	22.14			
		W2	1	1.10		1.50	-1.65			
		Bed Room + Toilet Wall	1	5.40		5.40	29.16			
		V	1	0.60		0.60	-0.36			
		Bed Room Wall	1	1.10		5.40	5.94			
		W2	1	1.10		1.20	-1.32			
		Bed Room Wall	1	3.55		5.40	19.17			
		W2	1	1.10		1.50	-1.65			
							179.82	sqm	156	28052.00
16	13.8.1	6 mm cement plaster of mix :CM 1:3 (1 cement: 3 sand)								
		Varanda	1	3.30	1.50		4.95			
		Living Room	1	3.40	3.40		11.56			
		Bed Room	1	3.40	3.30		11.22			
		Bed Room	1	3.40	3.55		12.07			
		Toilet	1	2.10	1.50		3.15			
		Almira Portion	1	0.50	0.55		0.28			
		Dining hall/Multipurpose Room	1	3.07	3.25		9.98			
		Kitchen	1	3.10	2.00		6.20			
		Bath	1	1.20	1.50		1.80			
		W.C.	1	0.90	1.25		1.13			
		gali	1	0.90	1.10		0.99			
		For Septic tank	1	3.10	2.10		6.51			
							69.83	sqm	96	6703.00
17	13.41	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, Like birla white /JK white or equivalent, over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. (SOR I.No. 13.41/P-106)								
		Qty of Distempring & w.p.c.p.					276.15	sqm	74	20435.00

18	13.3	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade										
	13.47.1	New work (two or more coats) over and including water thinnable priming coat with cement primer.										
		Qty of 12mm +15 mm plaster						276.15	sqm	60.00	16569.00	
19	13.53	Finishing walls with water proofing cement paint of required shade :										
	13.53.1	New work (Two or more coats applied @ 3.84 kg/10 sqm).										
		Qty of 20 mm plaster						179.82	sqm	48.00	8631.00	
20	11.53.	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete.										
	11.53.2	Size of Tile 600x600x9-10 mm										
		Varanda	1	3.30	1.50			4.95				
		Living Room	1	3.40	3.40			11.56				
		Bed Room	1	3.40	3.30			11.22				
		Bed Room	1	3.40	3.55			12.07				
		Toilet	1	2.10	1.50			3.15				
		Almira Portion	1	0.50	0.55			0.28				
		Dining hall/Multipurpose Room	1	3.07	3.25			9.98				
		Kitchen	1	3.10	2.00			6.20				
								59.40	sqm	894	53106.00	
21	11.24	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.										
		For Steps	11	1.50	0.30			4.95				
		Riser	11	1.50	0.17			2.81				
		gali	1	0.90	1.10			0.99				
								5.94	sqm	1012.00	6011.00	
22	5.24	Providing for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.										
			2	73.00				146.00				
			3	3.70				11.10				
								157.10	metre	18.50	2906.00	
23	10.1	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side /top /centre hung with beading and all members such as F7D, F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design (sectional weight of only steel members shall be measured for payment).										
	10.10.1	Fixing with 15x3 mm lugs 10 cm. long embedded in cement concrete block 15x10x10 cm of Cement Concrete 1:3:6 (1 Cement : 3 sand : 6 graded stone aggregate 20 mm nominal size).										
		W1	3	2.40	1.50			10.80				
		W2	2	1.80	1.50			5.40				
		W3	1	1.20	1.50			1.80				
		V.	3	0.60	0.60			1.08				
								19.08	Sqm			
		For Window @ 20 Kg/sqm						381.60	kg	106.85	40774.00	

24	10.13	Providing and fixing pressed steel door frames conforming to IS: 4351 manufactured from commercial mild steel sheet including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges, 2.5mm thick with mortar guards, lock strike-plate and shock absorbers as specified filling the frame with Cement Concrete 1:3:6 at site before fixing (cost of concrete to be paid separately) and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:								
	10.13.2	Profile C of 1.60mm thick single rebate of size 100mmx50mm								
	10.13.2.1	Fixing with adjustable lugs with split end tail to each jamb.								
		D1	3	1.00	2.10	2.10	15.60			
		D2	2	0.80	2.10	2.10	10.00			
		D3(Toil)	3	0.80	2.10	2.10	15.00			
							40.60	metre	431.40	17515.00
25	9.19	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters of such as duro board, century or equivalent make.								
	9.19.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.								
		D1	3	1.00	2.10		6.30			
		D2	2	0.80	2.10		3.36			
		D3(Toil)	3	0.80	2.10		5.04			
							14.70	sqm	2423.00	35618.00
26	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								
		W1	3	2.40	1.50		10.80			
		W2	2	1.80	1.50		5.40			
		W3	1	1.20	1.50		1.80			
		V.	3	0.60	0.60		1.08			
							19.08	Sqm	932.00	17783.00
27	13.7	Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.								
	13.70.2	Two coats.	1	67.56			67.56	sqm	53.00	3581.00

28	9.165	Providing and Fixing, factory made, PVC door frame made of PVC extruded sections of size 75mmx53 mm, having wall thickness 2.0mm (±0.2mm). Both verticals sides of the frame reinforced with PVC profile of cross section size 28mm x 30mm x2mm thickness (± 0.2 mm) and 75mmx200 mm long, including reinforcing both ends of the top frame with PVC profile. PVC Door Frame and PVC reinforcement profile to be mitred cut jointed and fusion welded together, including providing and fixing 3 nos. of 125mm long stainless steel hinges to frame, fixing the frame with jamb with required nos. and sizes of anchor dash fastener, all complete as per manufacturer's specification and direction of engineer-in-charge.								
			3	0.80	2.10		30.00	metre	435.00	13050.00
29	9.189	Providing and fixing 30mm thick factory made solid panel prelaminate PVC internal door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 40mm x 20mm for styles top, lock and bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame shall be covered with 5mm thick prelaminate heat moulded PVC 'C' channel of size 30mmx100mm forming stiles and 5mm thick prelaminate 125mm wide PVC sheets for top rail, lock rail and bottom rail on either side of panel and 15mm (5mmx3) thick, 20mm wide cross PVC sheet as gap insert for top and bottom rail. paneling of 10mm thick prelaminate PVC sheet to be fitted in the M.S. Frame welded/sealed to the stiles and rails with 30mm wideX5mm thick prelaminate PVC sheet beading on either side and additional 30mm wide PVC beading as gap insert below top and bottom rail joined together using solvent cement adhesive. An additional 5mm thick Prelaminate PVC strip of 20mm width is to be stuck on the interior side of the 'C' channel using PVC solvent cement adhesive etc. complete as per direction of Engineer-in-charge. Manufacturer's specification and drawing.								
	9.189.1	30 mm thick pre laminated PVC door shutters.	3	0.80	2.10		5.04	sqm	3908.00	19696.00
30	11.48	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (having thickness 6 to 7mm) of approved make in all Colours shades, such as burgundy, Bottle green, Black of size 300x450mm or more in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.								
		Bath	2	1.50		1.50	4.50			
			2	1.20		1.50	3.60			
		W.C.	2	1.25		0.90	2.25			
			2	0.90		0.90	1.62			
		Toilet	2	2.10		1.50	6.30			
			2	1.50		1.50	4.50			
							22.77	sqm	937.00	21335.00
31	11.51	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (having thickness 9 to 10mm) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 sand) including pointing the joints with white cement and matching pigments etc., complete.								
		Bath	1	1.20	1.50		1.80			

		W.C.	1	0.90	1.25		1.13			
		Toilet	1	2.10	1.50		3.15			
							6.08	sqm	997.00	6057.00
32		Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, uPVC P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, 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									
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	2				2.00	each	2995.00	5990.00
33	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 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								
			1	1000.00			1000.00	Ltr .	7.00	7000.00
34	9.60	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :								
	9.60.2	250x20x6 mm	14				14.00	each	67.00	938.00
35	9.61	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :								
		with necessary screws etc. complete :								
	9.61.1	125 mm	22				22.00	each	27.00	594.00
36	9.65	Providing and fixing ISI marked stainless steel sliding door bolts with nuts and screws etc. complete :								
	9.65.1	300x16 mm	8				8.00	each	389.00	3112.00
37	12.32	Providing and fixing on wall face Unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.								
		(i) Single socketed pipes								
	12.32.1	75 mm diameter (minimum wall thickness 1.8mm)	1	3.50			3.50	metre	136.00	476.00
	12.32..2	110 mm diameter (minimum wall thickness 2.2mm)	1	3.50			3.50	metre	238.00	833.00
38	19.33	Constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20m long complete as per standard design.								
			2				2.00	each	3172.00	6344.00
39	18.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc.								
		Internal work - Exposed on wall								
	18.10.1	15 mm dia. nominal bore	1	26.40			26.40	metre	211.00	5570.00
	18.10.3	25 mm dia. nominal bore	1	18.90			18.90	metre	300.00	5670.00
40	18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching								
		and refilling etc. External work								
	18.12.1	15 mm dia. nominal bore	1	26.40			26.40	metre	188.00	4963.00

	18.12.3	25 mm dia. nominal bore	1	18.90		18.90	metre	263.00	4971.00
41	18.5	Providing and fixing brass bib cock of approved quality :							
	18.50.1	15 mm nominal bore				15.00	each	306.00	4590.00
42	18.5	Providing and fixing brass stop cock of approved quality :							
	18.50.1	15 mm nominal bore	4			4.00	each	318.00	1272.00
43	18.35	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :Providing and fixing ball valve (brass) of approved quality, High							
	18.35.1	15 mm nominal bore	1			1.00	each	316.00	316.00
44	18.32	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)							
	18.32.3	25 mm nominal bore	1			1.00	each	486.00	486.00
45		Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 sand) including testing of joints etc. complete : Excavation to be paid seperately							
	19.1								
	19.1.1	100 mm diameter	18			18.00	metre	195.00	3510.00
46		Providing and laying cement concrete 1:5:10 (1 cement : 5 sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:							
	19.2								
	19.2.1	100 mm diameter S.W. pipe	18			18.00	metre	475.00	8550.00
47	10.23	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer.							
	10.23.1	M.S. tube.	1	80.00		80.00	kg	110.40	8832.00
48		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 :							
	17.11								
	17.11.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.							
			2			2.00	each	2460.00	4920.00
49	19.8	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 sand) including testing of joints etc. complete :							
	19.8.4	300 mm dia. R.C.C. pipe	1	10.00		10.00	metre	480.00	4800.00
50	12.33	Providing and 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 10 mm gap for thermal expansion.							
A	12.33.1	Coupler							
	12.33.1.1	75 mm (minimum wall thickness 1.8mm)	2			2.00	each	117.00	234.00

	12.33.1.2	110 mm (minimum wall thickness 2.2mm)	2				2.00	each	154.00	308.00
B	12.33.5	Bend 87.5°								
	12.33.5.1	75 mm bend (minimum wall thickness 1.8mm)	2				2.00	each	117.00	234.00
	12.33.5..2	110 mm bend (minimum wall thickness 2.2mm)	2				2.00	each	172.00	344.00
C	12.33.6	Shoe (Plain)								
	12.33.6.2	110 mm Shoe (minimum wall thickness 2.2mm)	2				2.00	each	300.00	600.00
51	22.14	Grading roof for water proofing treatment with								
	22.14.1	Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	1	79.12	0.075		5.93	cum	4569.00	27112.00
		TOTAL AMOUNT								1407482.00

**Sub Engineer,
Jt. Director Health,
Services, Bhopal**

**Assistant Engineer,
Jt. Director Health, Services,
Bhopal**

ESTIMATE FOR ELECTRIFICATION WORK OF G-TYPE QUARTER

S.No.	Sor no.	ITEM	Unit	Rate	Qty.	AMOUNT
1	4	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-				
A	4.1	<u>Light Point/Fan Points.</u>				
		a) Short point	Each	394	4	1576.00
		b) Medium point	Each	671	5	3355.00
		c) Long point	Each	1083	6	6498.00
B	4.2	<u>3 Pin 6 Amp socket outlet on Separate Board</u>				
		c) Long point	Each	1192	4	4768.00
C	4.3	<u>Call Bell / Buzzer Points</u>				
		c) Long point	Each	983	2	1966.00
2	4.5	Point wiring (excluding metallic switch box & sheet but including switches, sockets) for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board .	Each	285	6	1710.00
3	4.6	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) of ISI marked suitable size including painting etc. as required as per specification				
A		a) 2x2.5 Sq.mm.	Metre	117	14	1638.00
B		b) 4x2.5 Sq.mm.	Metre	176	8	1408.00
C		c) 6x2.5 Sq.mm.	Metre	225	8	1800.00
D		d) 8x2.5 Sq.mm.	Metre	277	6	1662.00
4	18.2	Supplying and fixing of approved make modular type metal box with modular frame/ base plate and cover plate including fixing in concealed / surface excluding switch, socket etc. as required for:-				
	18.2.1	1 Or 2 Module	Each	156	1	156.00
	18.2.2	3 Module	Each	208	4	832.00
	18.2.6	12 Module	Each	487	3	1461.00
5	16	Supplying and fixing PVC conduit ISI marked alongwith the accessories in concealed system including painting etc. as required				
	16.2	PVC . Conduit 25 mm (HMS)	Metre	72	45	3240.00

S.No.	Sor no.	ITEM	Unit	Rate	Qty.	AMOUNT
7	9.1	Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid P.V.C.Conduit (HMS) ISI Marked of suitable size including painting etc. with 16 Amp. F.T. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-				
		On Separate Board				
		B. Medium Point	Each	1335	1	1335.00
		C. Long Point	Each	1930	1	1930.00
		D. Extra Long -I	Each	2643	1	2643.00
8	27.1	Supplying of approved make, powder coated Metal Double Door Vertical TPN MCB DB IP 43 protection with provision for MCCB up to 160A TP/ FP 36kA as incomer and space for SP/TP MCBs as outgoing (without MCCB / MCBs) inclusive of bus bar & connections etc				
	27.10.1	4 way without MCCB	Each	8521	1	8521.00
9	27.5	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle , 10 kA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :-				
	A 27.5.1	SINGLE POLE (SP)				
	27.5.1.2	6 Amp to 32 Amp Rating	Each	205	6	1230.00
	B 27.5.4	FOR TRIPLE POLE (TP)				
	27.5.4.4	50 Amp to 63 Amp Rating	Each	1527	1	1527.00
12	37.34	Providing and fixing earthing arrangement with 16mm dia 2.5 metre long galvanized iron or steel rod electrode including packing of charcoal powder and salt as per specification watering pipe 19mm dia G.I. Connection, cover plate having locking arrangement on the top etc. complete with refilling the pit as required, including excavation of earth pit in soil/ soft rock.	Each	2287	1	2287.00
13	37.36	Supplying and laying G.I. earth lead duly installed on wall or in G.I. Pipe including connections etc complete as required.				
	37.36.1	13 sq mm (4 mm dia)	Metre	17	6	102.00
15	29.3	Supplying and fixing of approved make electronic dimmer / regulator including connection etc. as required on existing board				
	29.30.1	450 Watt	Each	228	4	912.00
16	30.1	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS				
	30.1.1	Ceiling Fan (5 star & ISI)-1200 mm Sweep	Each	2276	4	9104.00

S.No.	Sor no.	ITEM	Unit	Rate	Qty.	AMOUNT
17	30.6	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc.				
	30.6.1	300mm sweep 900 RPM	Each	2918	1	2918.00
18	31.3	Supplying, fixing & testing of approved make T-5 lamp channel luminary with epoxy white powder coated CRCA sheet steel housing box type channel with reflector cover including electronic ballast (HF), PF > 0.95, THD <30% complete duly wired (with tube rod) as per specification & fixing as below:				
	31.3.1	I) Fixing on wall/Ceiling on PVC plate Anchor fasteners and other necessary materials including connections etc. and as required.	Each	1172	3	3516.00
19	29.23	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked BC / ES cap of approved make as required as per specification				
	29.23.4	15 Watt	Each	194	10	1940.00
24	41.1	Supply of XLPE Insulated power cable (confirming IS-7098 Part-I) 1100 Volt grade, 1 core /2 core /3½ core/4 core ISI MARKED with Alu. Stranded /solid conductor				
	41.1.10.3	16 Sq.mm.	Metre	197	60	11820.00
		Total Amount Rs.				81855.00

**Sub Engineer
Directorate of
Health Services Bhopal**

**Assistant Engineer
Directorate of
Health Services Bhopal**

**Executive Engineer
Directorate of
Health Services Bhopal**

DETAILED ESTIMATE FOR G-TYPE QUARTER

CIVIL WORKS

No.	SOR Item No	Item	MEASURMENT						Rate	Amount
			No.	L	W	D/H	Qty	Unit		
1	2	3	4	5	6	7	8	9	10	11
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) 2.6.1								
	2.6.1	All kinds of soil.								
		Column C1	10	1.50	1.50	2.10	47.25			
			2	1.50	1.50	2.10	9.45			
		For Plinth Protection Wall	1	73.00	0.30	0.30	6.57			
		For Septic tank	1	3.50	2.50	1.80	15.75			
							79.02	Cum.	129	10194.00
2	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 :								
	4.1.2	With 40mm nominal size graded stone aggregate.								
	4.1.2.2	Nominal Mix -1 Cement : 3 sand : 6 graded stone aggregate (M 10)								
		Footing Base	10	1.50	1.50	0.15	3.38			
			2	1.50	1.50	0.15	0.68			
		For Base of Rooms								
		Varanda	1	3.30	1.50	0.15	0.74			
		Living Room	1	3.40	3.40	0.15	1.73			
		Bed Room	1	3.40	3.00	0.15	1.53			
		Almira Portion	1	0.50	0.80	0.15	0.06			
		Dining Hall/Multipurpose Room	1	2.97	3.25	0.15	1.45			
		Kitchen	1	3.00	2.00	0.15	0.90			
		Bath	1	1.20	1.50	0.15	0.27			
		W.C	1	0.90	1.25	0.15	0.17			
		gali	1	0.90	1.10	0.15	0.15			
		For Plinth Protection Wall	1	73.00	0.30	0.15	3.29			
		For Septic tank	1	3.50	2.50	0.15	1.31			
							15.65	Cum.	3808.00	59592.00
3	5.1	Providing and laying in position specified grade of reinforced cement concrete (with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :Providing and laying in position specified grade of reinforced cement								
	5.1.1	M 20 –Grade Concrete								
		D1	10	1.30	1.30	0.40	6.76			
			2	1.30	1.30	0.30	1.01			
		Col. Up to PB botom	10	0.30	0.40	1.60	1.92			
			2	0.30	0.40	1.70	0.41			
		Net PB Length	1	58.00	0.20	0.40	4.64			
		Curtain Wall	1	30.85	0.10	0.60	1.85			
		For Septik tank	1	3.10	2.10	0.15	0.98			
		Plinth slab	1	59.89		0.10	5.99			
							23.56	Cum	5091	119936.00

4	5.2	Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts etc. above plinth level and up to floor two level excluding cost of centering, shuttering, finishing and reinforcement :								
	5.2.1	M 20 –Grade Concrete								
		Col. Up to Slab Bottom	10	0.20	0.40	2.67	2.14			
			2	0.30	0.30	2.67	0.48			
		S.B.	1	57.85	0.20	0.28	3.24			
		T.B.	2	3.60	0.20	0.28	0.40			
			2	3.40	0.30	0.28	0.57			
		Slab	1	59.89		0.12	7.19			
							14.02	Cum	5202	72919.00
5	5.3	Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in beams, suspended floors, roofs having slope of any degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level and up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement in concrete grade.								
	5.3.1	M 20 –Grade Concrete								
		L.B.	1	57.85	0.20	0.20	2.31			
		Chajja	2	7.20	0.60	0.08	0.69			
							3.01	cum	5284.00	15879.00
6	5.16	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.								
	5.16.6	Thermo-Mechanically Treated bars.(TMT)								
		RCC					40.58			
		Steel= RCC Qty X 100 Kg/Cum of concrete for Estimate Purpose					4058.00	Kg	62.90	255248.00
7	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :								
A	5.9.1	Foundations, footings, bases of columns, etc. for concrete up to plinth level.								
		Footing	10	6.00		0.40	24.00			
			2	6.00		0.40	4.80			
		Col. Up to PB Botom	10	1.40		1.60	22.40			
			2	1.20		1.60	3.84			
							55.04	sqm	174.00	9577.00
B	5.9.2	Walls (any thickness) including attached pilasters butteresses, plinth beams and string courses etc.up to plinth level.								
		Net PB Length	1	104.50		0.40	41.80			
			1	104.50		0.10	10.45			
		Col. Up to PB Botom	1	30.50		1.30	39.65			
							91.90	sqm	267.00	24537.00
C	5.9.3	Suspended floors, roofs, landings, balconies and access platform.								
		Columns, Pillars, Posts and Struts Walls in super structure.								
		Col. Up to Slab Botom	10	1.60		2.67	42.72			
			2	1.20		2.67	6.41			
		L.B.	1	65.80		0.20	13.16			
		T.B.	1	68.40		0.38	25.99			
		Chajja	4	3.40		0.48	6.53			

		Sides	2	7.20		0.60	8.64			
		Slab	1	11.20		0.08	0.90			
		Sides	1	59.89	0.12		7.19			
		Slab Bottom	1	59.89			59.89			
							171.42	sqm	264.00	45255.00
8	2.27	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming consolidating in layers not exceeding 20cm in depth and dressing complete								
		Varanda	1	3.30	1.50	0.20	0.99			
		Living Room	1	3.40	3.40	0.20	2.31			
		Bed Room	1	3.40	3.00	0.20	2.04			
		Almira Portion	1	0.50	0.80	0.20	0.08			
		Dining hall/Multipurpose Room	1	2.97	3.25	0.20	1.93			
		Kitchen	1	3.00	2.00	0.20	1.20			
		Bath	1	1.20	1.50	0.20	0.36			
		W.C.	1	0.90	1.25	0.20	0.23			
		gali	1	0.90	1.10	0.20	0.20			
							9.34	Cum.	672.00	6273.00
9	2.28	Supplying and filling in plinth with hard muram/hard copra under floors including watering ramming cosolidating in layers not exceeding 20cm in depth and dressing complete.								
		Varanda	1	3.30	1.50	0.60	2.97			
		Living Room	1	3.40	3.40	0.60	6.94			
		Bed Room	1	3.40	3.00	0.60	6.12			
		Almira Portion	1	0.50	0.80	0.60	0.24			
		Dining hall/Multipurpose Room	1	2.97	3.25	0.60	5.79			
		Kitchen	1	3.00	2.00	0.60	3.60			
		Bath	1	1.20	1.50	0.60	1.08			
		W.C.	1	0.90	1.25	0.60	0.68			
		gali	1	0.90	1.10	0.60	0.59			
							28.01	Cum.	471.00	13191.00
10	2.25	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Q							
		Total Excavation in all Soil					79.02			
		Total Base Conc of Footing					-4.05			
		Total M-20 Footing					-7.77			
		Total M-20, Col up to GL					-2.33			
							64.87	Cum.	72.00	4671.00
11	6.5	Brick work with well brunt open bhatta, bricks, crushing strength not less than 25kg /cm2 and water absorpt ion not more than 20% in foundation and plinth i/c curing etc complete.								
	6.5.2	Cement Mortar 1:6 (1 cement : 6 sand).								
		Ver. Side Wall	1	1.50	0.20	0.80	0.24			
		living Room Wall	1	3.40	0.20	2.67	1.82			
		D	1	1.20	0.20	2.10	-0.50			
		W1	1	1.50	0.20	1.50	-0.45			
		living Room Wall	1	3.40	0.20	2.67	1.82			
		Kitchen Wall	1	3.10	0.20	2.67	1.66			
		Kitchen Wall	1	2.90	0.20	2.67	1.55			
		W	1	1.20	0.20	1.50	-0.36			
		D	1	1.00	0.20	2.10	-0.42			
		W3	1	0.60	0.20	1.50	-0.18			
		w.c. Wall	1	0.90	0.20	2.67	0.48			
		w.c. Wall	1	1.00	0.20	2.67	0.53			

		V	1	0.60	0.20	1.50	-0.18			
		bath wall	1	1.20	0.20	2.67	0.64			
		bath wall	1	1.50	0.20	2.67	0.80			
		V	1	0.60	0.20	1.50	-0.18			
		bath wall	1	1.60	0.20	2.67	0.85			
		Multipurpose Room wall	1	4.10	0.20	2.67	2.19			
		W1	1	1.20	0.20	1.50	-0.36			
		Bed room Wall	1	1.50	0.20	2.67	0.80			
		W	1	1.50	0.20	1.50	-0.45			
		Bed Room Wall	1	3.00	0.20	2.67	1.60			
		For Plinth Protection Wall	1	70.40	0.20	0.50	7.04			
		For Septic tank	1	5.00	0.30	2.40	3.60			
		For Septic tank	1	3.00	0.30	2.40	2.16			
		For Septic tank	1	3.00	0.30	1.20	1.08			
							25.78	cum	4155.00	107109.00
12		Providing half brick masonry with well burnt open bhatta bricks crushing strength not less than 25 kg /cm2 and water absorption not more than 20% in superstructure above plinth level and up to floor two level								
	6.14									
	6.14.2	Cement mortar 1:4 (1 cement :4 sand)								
		living Room+Bedroom Wall	1	3.40		2.67	9.08			
		Kitchen Room+m.p. room Wall	1	3.00		2.67	8.01			
		w.c. wall	1	0.90		2.67	2.40			
		D2 (tiol)	1	0.80		2.10	-1.68			
		Bed Room+m.p. room wall	1	3.00		2.67	8.01			
		D2 (tiol)	1	1.20		2.10	2.52			
		living Room+kitchen room Wall	1	3.40		2.67	9.08			
		OPEN	1	1.40		2.10	-2.94			
		Bed Room+c.b wall	1	0.50		2.67	1.34			
		C.B wall	1	0.80		2.67	2.14			
		w.c. wall	1	1.25		2.67	3.34			
		bath wall	1	1.50		2.67	4.01			
		D	1	0.80		1.50	-1.20			
							44.09	sqm	522	23016.00
13	13.1	12 mm thick cement plaster								
	13.1.2	Cement Mortar 1:6 (1 cement : 6 sand)								
		Ver. Side Wall	2	1.50		3.15	9.45			
		living Room wall	1	3.30		3.15	10.40			
		D	1	1.20		2.10	-5.04			
		W1	1	1.50		1.50	-2.25			
		living Room wall	1	3.40		3.15	10.71			
		Kitchen Wall	1	3.10		3.15	9.77			
		Kitchen Wall	1	2.90		3.15	9.14			
		W	1	1.20		1.50	-1.80			
		D	1	1.00		2.10	-2.10			
		W3	1	0.60		1.50	-0.90			
		w.c. wall	1	0.90		3.15	2.84			
		w.c. wall	1	1.00		3.15	3.15			
		v	1	0.60		0.60	-0.36			
		bath wall	1	1.20		3.15	3.78			
		bath wall	1	1.50		3.15	4.73			
		V	1	0.60		0.60	-0.36			
		bath wall	1	1.60		3.15	5.04			
		Multimurpose room wall	1	4.10		3.15	12.92			
		W	1	1.50		1.50	-2.25			
		Bed Room Wall	1	1.50		3.15	4.73			
		W	1	1.50		1.20	-1.80			
		Bed Room Wall	1	3.00		3.15	9.45			
		living Room+Bedroom wall	1	3.40		2.67	9.08			

		Kitchen +m.p. room wall	1	3.00		2.67	8.01			
		w.c. wall	1	0.90		2.67	2.40			
		D2(Toil)	1	0.80		2.10	-1.68			
		Bed Room +m.p. room Wall	1	3.00		2.67	8.01			
		D	1	1.20		2.10	2.52			
		living room+ Kitchen room Wall	1	3.40		2.67	9.08			
		Open	1	1.40		2.10	-2.94			
		Bed room+c.B wall	1	0.50		2.67	1.34			
		C.B. wall	1	0.80		2.67	2.14			
		w.c. wall	1	1.25		2.67	3.34			
		bath wall	1	1.50		2.67	4.01			
		D	1	0.80		1.50	-1.20			
		living Room+Bedroom wall	1	3.40		2.67	9.08			
		Kitchen +m.p. room wall	1	3.00		2.67	8.01			
		w.c. wall	1	0.90		2.67	2.40			
		D2(Toil)	1	0.80		2.10	-1.68			
		Bed Room +m.p. room Wall	1	3.00		2.67	8.01			
		D	1	1.20		2.10	2.52			
		living room+ Kitchen room Wall	1	3.40		2.67	9.08			
		Open	1	1.40		2.10	-2.94			
		Bed room+c.B wall	1	0.50		2.67	1.34			
		C.B. wall	1	0.80		2.67	2.14			
		w.c. wall	1	1.25		2.67	3.34			
		bath wall	1	1.50		2.67	4.01			
		D	1	0.80		1.50	-1.20			
							167.40	sqm	110	18414.00
14	13.3	20 mm cement plaster of mix :								
	13.3.2	1:6 (1 cement: 6 sand)								
		Ver. Side Wall	2	1.50		4.50	13.50			
		living Room wall	1	3.30		4.50	14.85			
		D	1	1.20		2.10	-2.25			
		W1	1	1.50		1.50	-2.25			
		living Room wall	1	3.40		4.50	15.30			
		Kitchen Wall	1	3.10		4.50	13.95			
		Kitchen Wall	1	2.90		4.50	13.05			
		W	1	1.20		1.50	-1.80			
		D	1	1.00		2.10	-2.10			
		W3	1	0.60		1.50	-0.90			
		w.c. wall	1	0.90		4.50	4.05			
		w.c. wall	1	1.00		4.50	4.50			
		v	1	0.60		0.60	-0.36			
		bath wall	1	1.20		4.50	5.40			
		bath wall	1	1.50		4.50	6.75			
		V	1	0.60		0.60	-0.36			
		bath wall	1	1.60		4.50	7.20			
		Multimurpose room wall	1	4.10		4.50	18.45			
		W	1	1.50		1.50	-2.25			
		Bed Room Wall	1	1.50		4.50	6.75			
		W	1	1.50		1.20	-1.80			
		Bed Room Wall	1	3.00		4.50	13.50			
							123.18	sqm	156	19216.00
15	13.8.1	6 mm cement plaster of mix :CM 1:3 (1 cement: 3 sand)								
		Varanda	1	3.30	1.50		4.95			
		Living Room	1	3.40	3.40		11.56			
		Bed Room	1	3.40	3.00		10.20			
		Almira Portion	1	0.50	0.80		0.40			
		Dining hall/Multipurpose Room	1	2.97	3.25		9.65			
		Kitchen	1	3.00	2.00		6.00			
		Bath	1	1.20	1.50		1.80			
		W.C.	1	0.90	1.25		1.13			

		gali	1	0.90	1.10		0.99			
		For Septic tank	2	3.10	2.20		13.64			
		Tower	2	2.20	2.20		9.68			
							70.00	sqm	96	6720.00
16	13.41	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, Like birla white /JK white or equivalent, over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. (SOR I.No. 13.41/P-106)								
		Qty of Distempring & w.p.c.p.					237.40	sqm	74	17568.00
17	13.47	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade								
	13.47.1	New work (two or more coats) over and including water thinnable priming coat with cement primer.								
		Qty of 12mm +15 mm plaster					237.4	sqm	60.00	14244.00
18	13.53	Finishing walls with water proofing cement paint of required shade :								
	13.53.1	New work (Two or more coats applied @ 3.84 kg/10 sqm).								
		Qty of 20 mm plaster					123.18	sqm	48.00	5913.00
19	11.53.	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete.								
	11.53.2	Size of Tile 600x600x9-10 mm								
		Varanda	1	3.30	1.50		4.95			
		Living Room	1	3.40	3.40		11.56			
		Bed Room	1	3.40	3.00		10.20			
		Almira Portion	1	0.50	0.80		0.40			
		Dining hall/Multipurpose Room	1	2.97	3.25		9.65			
		Kitchen	1	3.00	2.00		6.00			
							42.76	sqm	894	38230.00
20	5.24	Providing for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.								
			1	73.00			73.00			
			6	3.70			22.20			
							95.20	metre	18.50	1761.00
21	10.1	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side /top /centre hung with beading and all members such as F7D, F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design (sectional weight of only steel members shall be measured for payment).								
	10.10.1	Fixing with 15x3 mm lugs 10 cm. long embedded in cement concrete block 15x10x10 cm of Cement Concrete 1:3:6 (1 Cement : 3 sand : 6 graded stone aggregate 20 mm nominal size).								
		W1	3	2.40	1.50		10.80			
		W2	1	1.80	1.50		2.70			
		W3	1	1.20	1.50		1.80			
		V.	1	0.60	0.60		0.36			
							15.66	Sqm		

[illegible]

26	9.189	Providing and fixing 30mm thick factory made solid panel prelaminated PVC internal door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 40mm x 20mm for styles top, lock and bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame shall be covered with 5mm thick prelaminated heat moulded PVC 'C' channel of size 30mmx100mm forming stiles and 5mm thick prelaminated 125mm wide PVC sheets for top rail, lock rail and bottom rail on either side of panel and 15mm (5mmx3) thick, 20mm wide cross PVC sheet as gap insert for top and bottom rail. paneling of 10mm thick prelaminated PVC sheet to be fitted in the M.S. Frame welded/sealed to the stiles and rails with 30mm wideX5mm thick prelaminated PVC sheet beading on either side and additional 30mm wide PVC beading as gap insert below top and bottom rail joined together using solvent cement adhesive. An additional 5mm thick Prelaminated PVC strip of 20mm width is to be stuck on the interior side of the 'C' channel using PVC solvent cement adhesive etc. complete as per direction of Engineer-in-charge. Manufacturer's specification and drawing.								
	9.189.1	30 mm thick pre laminated PVC door shutters.	3	0.80	2.10		5.04	sqm	3908.00	19696.00
27	11.46	Providing and fixing Ceramic glazed wall tiles 300x450 mm or more (having thickness 6 to 7 mm) of 1st quality conforming to IS : 15622 of approved make in all Colours shades, Except burgundy, Bottle green, Black, laid on 12mm thick bed of Cement Mortar 1:3 (1 Cement : 3 sand) jointed with grey cement slurry @3.3 kg per sqm including pointing the joints with white cement and matching pigments etc., complete								
		Bath	2	1.50		1.50	4.50			
			2	1.20		1.50	3.60			
		W.C.	2	1.25		0.90	2.25			
			2	0.90		0.90	1.62			
							11.97	sqm	878.00	10510.00
28	11.49	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (having thickness 9 to 10mm) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Grey, Fume Red Brown, laid on 20mm thick cement mortar 1:4 (1 Cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete.								
		Bath	2	1.20	1.50		3.60			
		W.C.	2	0.90	1.25		2.25			
							5.85	sqm	961.00	5622.00
29	17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, uPVC P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, 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				2.00	each	2995.00	5990.00

[illegible]

39	19.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 sand) including testing of joints etc. complete : Excavation to be paid seperately								
	19.1.1	100 mm diameter	18				18.00	metre	195.00	3510.00
40	19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:								
	19.2.1	100 mm diameter S.W. pipe	18				18.00	metre	475.00	8550.00
41	17.11	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 :								
	17.11.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.								
			2				2.00	each	2460.00	4920.00
42	19.8	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 sand) including testing of joints etc. complete :								
	19.8.4	300 mm dia. R.C.C. pipe	1	10.00			10.00	metre	480.00	4800.00
43	12.33	Providing and 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 10 mm gap for thermal expansion.								
A	12.33.1	Coupler								
	12.33.1.1	75 mm (minimum wall thickness 1.8mm)	2				2.00	each	117.00	234.00
	12.33.1.2	110 mm (minimum wall thickness 2.2mm)	2				2.00	each	154.00	308.00
B	12.33.5	Bend 87.5°								
	12.33.5.1	75 mm bend (minimum wall thickness 1.8mm)	2				2.00	each	117.00	234.00
	12.33.5.2	110 mm bend (minimum wall thickness 2.2mm)	2				2.00	each	172.00	344.00
C	12.33.6	Shoe (Plain)								
	12.33.6.2	110 mm Shoe (minimum wall thickness 2.2mm)	2				2.00	each	300.00	600.00
44	22.14	Grading roof for water proofing treatment with								
	22.14.1	Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	1	62.00		0.075	4.65	cum	4569.00	21246.00
		TOTAL AMOUNT								1099014.00

**Sub Engineer,
Jt. Director Health,
Services, Bhopal**

**Assistant Engineer,
Jt. Director Health, Services,
Bhopal**

ESTIMATE FOR ELECTRIFICATION WORK OF H-TYPE QUARTER

S.No.	Sor no.	ITEM	Unit	Rate	Qty.	AMOUNT
1	4	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-				
A	4.1	<u>Light Point/Fan Points.</u>				
		a) Short point	Each	394	3	1182.00
		b) Medium point	Each	671	3	2013.00
		c) Long point	Each	1083	4	4332.00
B	4.2	<u>3 Pin 6 Amp socket outlet on Separate Board</u>				0.00
		c) Long point	Each	1192	2	2384.00
C	4.3	<u>Call Bell / Buzzer Points</u>				0.00
		c) Long point	Each	983	1	983.00
2	4.5	Point wiring (excluding metallic switch box & sheet but including switches, sockets) for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board .	Each	285	3	855.00
3	4.6	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) of ISI marked suitable size including painting etc. as required as per specification				0.00
A		a) 2x2.5 Sq.mm.	Metre	117	20	2340.00
B		b) 4x2.5 Sq.mm.	Metre	176	15	2640.00
C		c) 6x2.5 Sq.mm.	Metre	225	15	3375.00
D		d) 8x2.5 Sq.mm.	Metre	277	10	2770.00
						0.00
4	18.2	Supplying and fixing of approved make modular type metal box with modular frame/ base plate and cover plate including fixing in concealed / surface excluding switch, socket etc. as required for:-				0.00
	18.2.1	1 Or 2 Module	Each	156	1	156.00
	18.2.2	3 Module	Each	208	3	624.00
	18.2.6	12 Module	Each	487	3	1461.00
						0.00
5	16	Supplying and fixing PVC conduit ISI marked alongwith the accessories in concealed system including painting etc. as required				0.00
	16.2	PVC . Conduit 25 mm (HMS)	Metre	72	30	2160.00
						0.00
						0.00

S.No.	Sor no.	ITEM	Unit	Rate	Qty.	AMOUNT
6	9.1	Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid P.V.C.Conduit (HMS) ISI Marked of suitable size including painting etc. with 16 Amp. F.T. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-				0.00
		On Separate Board				0.00
		B. Medium Point	Each	1335	1	1335.00
		C. Long Point	Each	1930	1	1930.00
		D. Extra Long -I	Each	2643	1	2643.00
7	27.1	Supplying of approved make, powder coated Metal Double Door Vertical TPN MCB DB IP 43 protection with provision for MCCB up to 160A TP/ FP 36kA as incomer and space for SP/TP MCBs as outgoing (without MCCB / MCBs) inclusive of bus bar & connections etc				0.00
	27.10.1	4 way without MCCB	Each	8521	1	8521.00
						0.00
8	27.5	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle , 10 kA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :-				
	A 27.5.1	SINGLE POLE (SP)				
	27.5.1.2	6 Amp to 32 Amp Rating	Each	205	4	820.00
	B 27.5.4	FOR TRIPLE POLE (TP)				
	27.5.4.4	50 Amp to 63 Amp Rating	Each	1527	1	1527.00
						0.00
9	37.34	Providing and fixing earthing arrangement with 16mm dia 2.5 metre long galvanized iron or steel rod electrode including packing of charcoal powder and salt as per specification watering pipe 19mm dia G.I. Connection, cover plate having locking arrangement on the top etc. complete with refilling the pit as required, including excavation of earth pit in soil/ soft rock.	Each	2287	1	2287.00
	37.36	Supplying and laying G.I. earth lead duly installed on wall or in G.I. Pipe including connections etc complete as required.				0.00
	37.36.1	13 sq mm (4 mm dia)	Metre	17	6	102.00
						0.00
						0.00
11	29.3	Supplying and fixing of approved make electronic dimmer / regulator including connection etc. as required on existing board				0.00
	29.30.1	450 Watt	Each	228	4	912.00
12	30.1	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS				0.00
	30.1.1	Ceiling Fan (5 star & ISI)-1200 mm Sweep	Each	2276	4	9104.00
						0.00

S.No.	Sor no.	ITEM	Unit	Rate	Qty.	AMOUNT
13	30.6	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc.				
	30.6.1	300mm sweep 900 RPM	Each	2918	2	5836.00
14	31.3	Supplying, fixing & testing of approved make T-5 lamp channel luminary with epoxy white powder coated CRCA sheet steel housing box type channel with reflector cover including electronic ballast (HF), PF > 0.95, THD <30% complete duly wired (with tube rod) as per specification & fixing as below:				
	31.3.1	I) Fixing on wall/Ceiling on PVC plate Anchor fasteners and other necessary materials including connections etc. and as required.	Each	1172	3	3516.00
15	29.23	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked BC / ES cap of approved make as required as per specification				
	29.23.4	15 Watt	Each	194	10	1940.00
16	41.1	Supply of XLPE Insulated power cable (confirming IS-7098 Part-I) 1100 Volt grade, 1 core /2 core /3½ core/4 core ISI MARKED with Alu. Stranded /solid conductor				
	41.1.10.3	16 Sq.mm.	Metre	197	45	8865.00
		Total Amount Rs.				76613.00

**Sub Engineer
Directorate of
Health Services Bhopal**

**Assistant Engineer
Directorate of
Health Services Bhopal**

**Executive Engineer
Directorate of
Health Services Bhopal**

**ESTIMATE FOR DRILLING OF TUBE WELL (150/125 mm) dia AT SUB HEALTH
CENTER AP PER PHE SOR**

S.N.	Sor No.	ITEM DESCRIPTION	Units	Rate	Qty.	Amount
1	1	Carrying out the resistivity survey by VES method using Schlumberger successful configuration for locating the proper spot with three soundings for drilling of tube well within the selected habitation, including photography, interpretation of resistivity data and submission of report in the desired format along with resistivity readings, necessary graph and photographs.	Per point	1460	3.00	4380.00
2	3	Drilling of perfectly vertical bore hole of a diameter suitable to receive 150 mm nominal diameter casino, pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 150 mm nominal diameter M.S/ G.I / U.P.V.C casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc. complete.				
	(a)	in all types of collapsible strata consisting of soils, clays, sand, moorum, gravel, boulders etc.	Meter	521	24.00	12504.00
	(h)	in all types of rocks.	Meter	626	126.00	78876.00
3	8	Providing and fixing of well cap on top of the tube well for protection M.S. Caps -				
	(c) 1	50 min dill.	each	205	1.00	205.00
4	7	I.S.I. marked UPVC casing Pipe Confirming to IS 12818/92 (with up-to-date amendments) Screen pipes with ribs 150 Inln dia	Meter	627	24.00	15048.00
5	2	Conducting the yield test of tubewell by operating the pumping set continuously for a desired time period and measuring the discharge and drawdown of tubewell at a suitable time interval as per the direction of Engineer in Charge including cost of energy, cost of installation of suitable measuring device and hire charges of pumping set etc. complete				

S.N.	Sor No.	ITEM DESCRIPTION	Units	Rate	Qty.	Amount
	(h)	Submersible pumping set above 2.2 kW to 7.5 kW	Per hour	434	6.00	2604.00
6	5	ISI Mark 32 mm. dia. G.I. riser pipe in meter length socketed on one end as per I.S. 1239 (Part I) 1 990 up-to-date amendments and socket as per I.S. 2062/1990 up-to-date amendment.	3 Meter	175	60.00	10500.00
7	1	ISI mark India mark-II deep well hand pump complete with 10 Nos. MS connecting rods. (12 mm x 3M long) Normal stand assembly.	Each	6120	1.00	6120.00
8	1	Labour charges for installation of India Mark II Hand Pump with 30 meter long 32 mm dia. riser pipe assembly and all other accessories including transportation of Hand Pump from specified departmental stores to site.	Each	540	1.00	540.00
9	5	Construction of cement concrete platform as per design around the hand pump in 1:2:4 cement concrete including excavation, centering, shuttering, cost of all the materials and labour and curing etc complete. Including filling in 30 cm depth after removing Black cotton soil including ramming, watering etc. complete in areas of Black cotton soils.	Each	3600	1.00	3600.00
10	7	Construction of cement concrete drain as per design in 1 :2:4 cement concrete including excavation, centering, shuttering, cost of all the materials and labour and curing etc complete. Including filling in 30 cm depth after removing Black cotton soil including ramming, watering etc. complete in areas of Black cotton soils.	meter	424	6.00	2544.00
11	9	Construction of 1.20 m x 1 .20 m x 0.20 m cement concrete washing platform in cement concrete 1 :2:4 including excavation, centering, shuttering, cost of all the materials and labour and curing etc. complete. Including filling in 30 cm depth after removing Black cotton soil including ramming, watering etc. complete in areas of Black cotton soils.	Each	1523	1.00	1523.00
12	1 0	Construction of sokage pit of 70 cm dia. and 1 .0 m deep including excavation, brick lining at top in 1:4 cement mortar, filling of broken bricks				

S.N.	Sor No.	ITEM DESCRIPTION	Units	Rate	Qty.	Amount
		etc. and cost of all the materials and labour and curing etc complete.	Each	419	1.00	419.00
13	27.21	Supplying & Installation of required capacity of single phase, 50 Hz, 220V, deep well submersible pump Stainless Steel body, as per IS of approved Make, suitable for 4"/6" tube well with control panel starter suitable for submersible pump with dry run protection, connections, including clamps, bore cap etc. as required as per specification but excluding pipe, SS/Nylon wire rope and connection cable				
	27.21.3.	2 H.P. with 20 to 22 stages, Head Mt 147-42				
	4	Discharge LPM 15-55	Each	31271	1.00	31271.00
14	27.23	Supplying and laying of submersible flat cable ISI marked 3 core copper wire of suitable size with propre clamping of approved make.				
	27.23.2	4.0 Sq.mm multi strand	Per mtr	185	75.00	13875.00
15	27.25	Supplying and laying of approved make Nylon rope 12 mm thick complete with binding for support of pump and motor.				
			Per mtr	75	75.00	5625.00
		TOTAL AMOUNT Rs.				189634.00
		Say Amount Rs.				190000.00

**SUB ENGINEER
HEALTH SERVICES, BHOPAL**

**ASSISTANT ENGINEER
HEALTH SERVICES,
BHOPAL**

Estimate for Construction of Boundary wall

S.No	Particulars of Items	Qty.	Unit	Rate	Amount
1	Boring, providing and installing bored cast-in-situ reinforced cement concrete single under reamed pile of specified diameter and length below the pile cap M20 in cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring. The length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap). Excluding cost of Steel. And rates are inclusive of cost of concrete				
	20.9.3 300 mm diameter.				
	(SOR I.No. 20.10.2)				
	5 x 3.00 =	15	Rmt.	662	9930.00
2	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.				
	5.16.6 Thermo-Mechanically Treated bars.(TMT) (SOR I.No. 5.16.6/P-22)				
	Pile 120x5x 4 x 5.60 – 112.00	0.888			
	Ring 80 dia				
	200 mm c/c 5 x 25 x 1.00 -125.00	49.37			
	Plinth beam				
	120 x 4 x 10.30 = 41.20 = 0.888	36.58			
	Boring 1 x 60 x 1.00 = 60.00 x 0.395	23.7			
		209.1	Kg.	62.5	13069.00
3	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.2 Walls (any thickness) including attached pilasters buttresses, plinth beams and string courses etc.up to plinth level.				
	(SOR I.No. 5.9.2/P-21)				
	Side – 2x10.00x0.30 =	6	Sqm.	267	1602.00
4	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.3 Suspended floors, roofs, landings, balconies and access platform. Shelves (Cast in situ) Lintels, beams, beams, girders, bressumers and cantilevers, Columns, Pillars, Posts and Struts Walls in super structure				
	5 x 1.00 x 1.80 =	9	Sqm.	264	2376.00
5	Providing and laying in position specified grade of reinforced cement concrete (with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
	5.1.1 M 20 Nomial mix				
	Plinth beam				
	1x10.00x0.20x0.30 = 0.60				
	Col. 5x0.20x0.30x1.80 = 0.54				
	Top coping 1x10.00x0.20x0.10= 0.20				

	1.34	1.34	Cum.	5051	6768.00
6	Brick work with M.S. bricks of class designation 40 in superstructure above plinth level up to floor II level in all shapes and sizes in : 6.6.2 Cement mortar 1:6 (1 cement : 6 sand) (SOR I.No. 6.4.2/P-27) For Boundry wall 1 x 10.00 x 0.20 x 1.80 =	3.6	Cum.	4350	15660.00
7	12 mm cement plaster of mix : 13.1.2 1:6 (1 cement: 6 sand) (SOR I.No. 13.1.2/P-99) 1 x 10.00 x 2.50m =	25	Sqm.	110	2750.00
8	15 mm cement plaster on rough side of single or half brick wall of mix : 13.2.2 1:6 (1 cement: 6 sand) (SOR I.No. 13.3.2/P-99) 1x 10.00 x 2.50 = 25.00 1 x 10.00 x 0.20 = 2.00 27	27	Sqm.	128	3456.00
9	Applying one coat of cement primer of approved brand and manufacture on wall surface : 13.32.1 Cement primer. (SOR I.No. 13.32.1/P-101) Qty. same as 12 mm + 15 mm plaster 25.00 + 27.00 =	52	Sqm.	24	1248.00
10	Finishing walls with water proofing cement paint of required shade : 13.33.1 New work (Two or more coats applied @ 3.84 kg/10 sqm). (SOR I.No. 13.53.1/P-102) Qty. same as above =	52	Sqm.	48	2496.00
		For 10.00 m boundary wall			59355.00
		So far 1.00 m boundary wall			5935.50
		So for 280m x @5935.50 =			1661940.00

**Sub Engineer
Joint Director
Health Services Bhopal**

**Assistant Engineer
Joint Director
Health Services Bhopal**

**DETAILED ESTIMATE FOR CONSTRUCTION OF APPROACH ROAD
(100 M LENTH X 6 M WIDE)**

S.No.	SOR no.	Description of Item	No.	L	W	H/D	Qty.	Rate	Unit	Amount
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means)								
		All kinds of soil	1	100.00	6.00	0.30	180.00	cum.	129.00	23220.00
2	2.27	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming consolidating in layers not exceeding 20cm in depth and dressing complete								
			1	100.00	6.00	0.20	120.00	cum.	672.00	80640.00
3	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 :								
	4.1.2	With 40mm nominal size graded stone aggregate.								
	4.1.2.2	Nominal Mix -1 Cement : 3 sand : 6 graded stone aggregate (M 10)	1	100.00	6.00	0.10	60.00	cum	3808.00	228480.00
4	5.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :								
	4.1.1.3	M 20 – Grade concrete	1	100.00	6.00	0.15	90.00	cum	4933.00	443970.00
		TOTAL AMOUNT								776310.00

**Sub Engineer
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