NAME OF WORK :- CONSTRUCTION OF COMMERCIAL COMPLEX FOR PANCHAYAT SAMITI GIRWA, UDAIPUR

PART 'A' CIVIL WORK FIRST FLOOR
DETAILS OF MEASUREMENTS

S.N.	Particulars	Nos.		Length	Breadth	Height		Qty.	Units
	Center to center distances								
	Ground Floor								
	Main walls 230 mm th. in x and Y								
	Back Side	1	x	3.58			=	3.58	RM
		1	x	6.40			=	6.40	RM
		1	x	3.20			=	3.20	RM
		1	x	3.20			=	3.20	RM
		1	x	5.33			=	5.33	RM
	Left Side	1	x	7.62			=	7.62	RM
		1	x	4.27			=	4.27	RM
		1	x	7.62			=	7.62	RM
	Front Side	1	x	3.58			=	3.58	RM
		1	x	3.20			=	3.20	RM
	Right Side	1	x	25.60			=	25.60	RM
	Staircase	2	x	3.35			=	6.70	RM
	Lobby/ Shop	1	x	5.49			=	5.49	RM
						TOTAL	=	85.79	RM
	PARAPET WALL 230 MM								
	Back Side	1	x	3.58			=	3.58	RM
		1	x	6.40			=	6.40	RM
		1	x	3.20			=	3.20	RM
		1	x	3.20			=	3.20	RM
		1	x	5.33			=	5.33	RM
	Left Side	1	x	7.62			=	7.62	RM
		1	x	4.27			=	4.27	RM
		1	x	7.62			=	7.62	RM
	Front Side	1	x	3.58			=	3.58	RM
		1	x	3.20			=	3.20	RM
	Right Side	1	x	25.60			=	25.60	RM
						TOTAL	=	73.60	RM
	Brick Partition walls in X and Y Direction								
	Shops 2,3	3	x	7.39			=	22.17	RM
	Shops 6,7 in Y Direction	2	x	5.49			=	10.98	RM
	Shops 6,1 in X Direction	2	x	3.35			=	6.70	RM
	Shop 7 in X Direction	1	x	3.05			=	3.05	RM
	Shop 4 in X Direction	1	x	5.26			=	5.26	RM
	Shop 5 in X Direction	1	x	3.66			=	3.66	RM
	Shop 8 in Y Direction	1	x	5.49			=	5.49	RM
	Toilets in Y Direction	2	x	2.13			=	4.26	RM
						TOTAL	=	61.57	RM
1	Earth work in excavation in foundation trenches or drains including dressing of sides and ramming of bottoms, lift up to 1.5 Mtr. including taking out the excavated soil and depositing and refilling of jhiri with watering & ramming and disposal of surplus excavated soil as directed within a lead of 50 meter. All kinds of soil.								
	Average Width (49.83+18.44)/2=34.14	1	x	34.14	x 37.80	x 1.20	=	1548.59	Cum

S.N.	Particulars	Nos.		Length		Breadth	Height	Qty.	Units
						Total		**1548.59**	**Cum**
2	Filling available excavated earth (excluding rock) in trenches, plinth side of foundation etc. in layers not exceeding 20 cm. in depth , consolidating each deposited layer by ramming and watering including lead upto 50Mtr. and lift upto 1.5Mtr.						0		
	Average Width (49.83+18.44)/2=34.14								
	Area of Open Excavation		1 x	34.14	x	37.80	=	1290.49	Sqm
	Deductions								
	Footing Area								
	C1	1	x	2.00	x	2.30	=	4.60	Sqm
	C2	1	x	2.40	x	2.70	=	6.48	Sqm
	C3	1	x	2.90	x	3.10	=	8.99	Sqm
	C4	1	x	2.10	x	2.30	=	4.83	Sqm
	C5	1	x	2.90	x	3.10	=	8.99	Sqm
	C6	1	x	2.70	x	2.90	=	7.83	Sqm
	C7	1	x	2.70	x	2.90	=	7.83	Sqm
	C8	1	x	2.10	x	2.30	=	4.83	Sqm
	C9	1	x	2.90	x	3.10	=	8.99	Sqm
	C10	1	x	2.90	x	3.10	=	8.99	Sqm
	C11	1	x	2.40	x	2.60	=	6.24	Sqm
	C12	1	x	3.00	x	3.20	=	9.60	Sqm
	C13	1	x	1.80	x	2.00	=	3.60	Sqm
	C14	1	x	2.60	x	2.80	=	7.28	Sqm
	C15	1	x	2.50	x	2.70	=	6.75	Sqm
	C16	1	x	2.10	x	2.30	=	4.83	Sqm
	C17	1	x	2.20	x	2.50	=	5.50	Sqm
	C18	1	x	2.30	x	2.50	=	5.75	Sqm
						Total Deductions	-	121.91	Sqm
	Net earth Filling Area			1290.49	-	121.91	**=**	**1168.58**	Sqm
	Qty. in Filling			1168.58	x	1.00	=	1168.58	Cum
						Total		**1168.58**	**Cum**
3	Providing and injection Chloropyrifous Emulsifiable concentrate 20 % with 1 % concentration for PRE-CONSGTRUCTIONAL Anti termite treatment as per IS 6313 part III and amended from time to time and creating a continous chemical barrier under and around the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall and floor along the external perimeter of building expansion joints, over the top surface of consolidated earth of which aproch is to be laid surrounding of pipes and conduits etc. complete as per specification (Plinth floor area only shall be measured for payment.)								
	Average Width (49.83+18.44)/2=34.14								

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
	Area of Open Excavation	1	x	34.14	x	37.80			=	1290.49	Sqm
						Total				**1290.49**	**Sqm**
4	Providing and laying in position cement concrete including curing compaction etc. of specified grade excluding the cost of centering and shuttering =All up to plinth leve 1:4:8 (1Cement :4 Coarse Sand :8 Graded stone aggregate 40 mm nominal size										
	FOOTING										
	F1	1	x	2.00	x	2.30	x	0.30	=	1.38	Cum
	F2	1	x	2.40	x	2.70	x	0.30	=	1.94	Cum
	F3	1	x	2.90	x	3.10	x	0.30	=	2.70	Cum
	F4	1	x	2.10	x	2.30	x	0.30	=	1.45	Cum
	F5	1	x	2.90	x	3.10	x	0.30	=	2.70	Cum
	F6	1	x	2.70	x	2.90	x	0.30	=	2.35	Cum
	F7	1	x	2.70	x	2.90	x	0.30	=	2.35	Cum
	F8	1	x	2.10	x	2.30	x	0.30	=	1.45	Cum
	F9	1	x	2.90	x	3.10	x	0.30	=	2.70	Cum
	F10	1	x	2.90	x	3.10	x	0.30	=	2.70	Cum
	F11	1	x	2.40	x	2.60	x	0.30	=	1.87	Cum
	F12	1	x	3.00	x	3.20	x	0.30	=	2.88	Cum
	F13	1	x	1.80	x	2.00	x	0.30	=	1.08	Cum
	F14	1	x	2.60	x	2.80	x	0.30	=	2.18	Cum
	F15	1	x	2.50	x	2.70	x	0.30	=	2.03	Cum
	F16	1	x	2.10	x	2.30	x	0.30	=	1.45	Cum
	F17	1	x	2.20	x	2.50	x	0.30	=	1.65	Cum
	F18	1	x	2.30	x	2.50	x	0.30	=	1.73	Cum
	Basement Wall and Raft AREA	1	x	1168.58	x	1.00	x	0.15	=	175.29	Cum
						Total Qty.				**211.86**	**Cum**
5	Providing and laying in position specified grade of reinforcement cement concrete all RCC structural elements upto plinth level including curing compaction finishing with rendering in cement sand mortar 1:3 (1 cement : 3 coarse sand) and making good the joints excluding the cost of centering										
	FOOTING										
	F1	1	x	1.70	x	2.00	x	0.60	=	2.04	Cum
	F2	1	x	2.10	x	2.40	x	0.75	=	3.78	Cum
	F3	1	x	2.60	x	2.80	x	0.80	=	5.82	Cum
	F4	1	x	1.80	x	2.00	x	0.60	=	2.16	Cum
	F5	1	x	2.60	x	2.80	x	0.90	=	6.55	Cum
	F6	1	x	2.40	x	2.60	x	0.75	=	4.68	Cum
	F7	1	x	2.40	x	2.60	x	0.75	=	4.68	Cum
	F8	1	x	1.80	x	2.00	x	0.60	=	2.16	Cum
	F9	1	x	2.60	x	2.80	x	0.75	=	5.46	Cum
	F10	1	x	2.60	x	2.80	x	0.90	=	6.55	Cum
	F11	1	x	2.10	x	2.30	x	0.75	=	3.62	Cum
	F12	1	x	2.70	x	2.90	x	0.80	=	6.26	Cum
	F13	1	x	1.50	x	1.70	x	0.75	=	1.91	Cum
	F14	1	x	2.30	x	2.50	x	0.75	=	4.31	Cum
	F15	1	x	2.20	x	2.40	x	0.65	=	3.43	Cum

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
	F16	1	x	1.80	x	2.00	x	0.60	=	2.16	Cum
	F17	1	x	1.90	x	2.20	x	0.75	=	3.14	Cum
	F18	1	x	2.00	x	2.20	x	0.75	=	3.30	Cum
	TOTAL QTY IN FOOTING	**72.03**		**Cum**							
	BASEMENT WALL										
	Base Left Side	1	x	35.05	x	3.50	x	0.30	=	36.80	Cum
	Back Side	1	x	46.79	x	3.50	x	0.30	=	49.13	Cum
	Right Side	1	x	48.46	x	3.50	x	0.30	=	50.88	Cum
	Front Side	1	x	15.70	x	3.50	x	0.30	=	16.49	Cum
	Wall Left Side av width (250+350)/2= 300 mm	1	x	35.05	x	0.30	x	3.50	=	36.80	Cum
	Back Side	1	x	46.79	x	0.30	x	3.50	=	49.13	Cum
	Right Side	1	x	48.46	x	0.30	x	3.50	=	50.88	Cum
	Front Side	1	x	15.70	x	0.30	x	3.50	=	16.49	Cum
	TOTAL QTY IN BASEMENT WALL	**#####**		**Cum**							
	COLUMNS										
	C1	1	x	0.30	x	0.60	x	3.25	=	0.59	Cum
	C2	1	x	0.30	x	0.60	x	3.25	=	0.59	Cum
	C3	1	x	0.45	x	0.68	x	3.25	=	0.99	Cum
	C4	1	x	0.30	x	0.53	x	3.25	=	0.51	Cum
	C5	1	x	0.38	x	0.60	x	3.25	=	0.74	Cum
	C6	1	x	0.38	x	0.60	x	3.25	=	0.74	Cum
	C7	1	x	0.38	x	0.60	x	3.25	=	0.74	Cum
	C8	1	x	0.30	x	0.53	x	3.25	=	0.51	Cum
	C9	1	x	0.45	x	0.68	x	3.25	=	0.99	Cum
	C10	1	x	0.30	x	0.53	x	3.25	=	0.51	Cum
	C11	1	x	0.45	x	0.68	x	3.25	=	0.99	Cum
	C12	1	x	0.38	x	0.60	x	3.25	=	0.74	Cum
	C13	1	x	0.30	x	0.53	x	3.25	=	0.51	Cum
	C14	1	x	0.38	x	0.60	x	3.25	=	0.74	Cum
	C15	1	x	0.38	x	0.60	x	3.25	=	0.74	Cum
	C16	1	x	0.30	x	0.53	x	3.25	=	0.51	Cum
	C17	1	x	0.30	x	0.53	x	3.25	=	0.51	Cum
	C18	1	x	0.30	x	0.53	x	3.25	=	0.51	Cum
	TOTAL QTY IN COLUMNS IN BASEMENT	**12.16**		**Cum**							
	Lift	4	x	1.75	x	0.23	x	3.20	=	5.15	Cum
		-1	x	1.20	x	0.23	x	3.20	=	-0.88	Cum
	Stair Case Base Beam	1	x	1.68	x	0.30	x	0.60	=	0.30	Cum
	Stair slab	2	x	3.70	x	1.60	x	0.25	=	2.96	Cum
		1	x	2.10	x	1.60	x	0.25	=	0.84	Cum
	Beam	2	x	4.20	x	0.23	x	0.45	=	0.87	Cum
	Beam	2	x	3.30	x	0.23	x	0.45	=	0.68	Cum
	<u>Qty of Lift and Staircase in Basement</u>	**9.92**		**Cum**							
	BEAMS										
	B1	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B2	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B3	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B4	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B5	1	x	1.80	x	0.23	x	0.45	=	0.19	Cum
	B6	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B7	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B8	1	x	2.85	x	0.23	x	0.45	=	0.29	Cum
	B9	1	x	2.91	x	0.23	x	0.45	=	0.30	Cum

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
	B10	1	x	1.80	x	0.23	x	0.45	=	0.19	Cum
	B11	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B12	1	x	6.43	x	0.23	x	0.45	=	0.67	Cum
	B13	1	x	2.91	x	0.23	x	0.45	=	0.30	Cum
	B14	1	x	0.29	x	0.23	x	0.45	=	0.03	Cum
	B15	1	x	3.20	x	0.23	x	0.45	=	0.33	Cum
	B16	1	x	1.80	x	0.23	x	0.45	=	0.19	Cum
	B17	1	x	6.43	x	0.23	x	0.45	=	0.67	Cum
	B18	1	x	3.58	x	0.23	x	0.45	=	0.37	Cum
	B19	1	x	6.43	x	0.23	x	0.45	=	0.67	Cum
	B20	1	x	3.20	x	0.23	x	0.45	=	0.33	Cum
	B21	1	x	3.20	x	0.23	x	0.45	=	0.33	Cum
	B22	1	x	5.33	x	0.23	x	0.45	=	0.55	Cum
	B23	1	x	1.80	x	0.23	x	0.45	=	0.19	Cum
	B24	1	x	1.50	x	0.23	x	0.45	=	0.16	Cum
	B25	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B26	1	x	4.57	x	0.23	x	0.45	=	0.47	Cum
	B27	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B28	1	x	1.50	x	0.23	x	0.45	=	0.16	Cum
	B29	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B30	1	x	4.57	x	0.23	x	0.45	=	0.47	Cum
	B31	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B32	1	x	1.50	x	0.23	x	0.45	=	0.16	Cum
	B33	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B34	1	x	4.57	x	0.23	x	0.45	=	0.47	Cum
	B35	1	x	4.57	x	0.23	x	0.45	=	0.47	Cum
	B36	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B37	1	x	4.57	x	0.23	x	0.45	=	0.47	Cum
	B38	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B39	1	x	7.62	x	0.23	x	0.45	=	0.79	Cum
	B40	1	x	2.34	x	0.23	x	0.45	=	0.24	Cum
	B41	1	x	9.55	x	0.23	x	0.45	=	0.99	Cum
	B42	1	x	9.55	x	0.23	x	0.45	=	0.99	Cum
	B43	1	x	5.75	x	0.23	x	0.45	=	0.60	Cum
	B44	1	x	5.75	x	0.23	x	0.45	=	0.60	Cum
	B45	1	x	9.30	x	0.23	x	0.45	=	0.96	Cum
	B46	1	x	9.30	x	0.23	x	0.45	=	0.96	Cum
TOTAL QTY IN BEAMS IN BASEMENT		**22.65**		**Cum**							
	Roof Slab										
	Average Width (21.72+6.40)/2=14.06										
	Qty. in Slab	1	x	14.06	x	21.03	x	0.15	=	44.35	Cum
TOTAL QTY IN SLABS IN BASEMENT		**44.35**		**Cum**							
								Total Qty.		**467.72**	**Cum**

S.N.	Particulars	Nos.	Length	Breadth	Height	Qty.	Units
6	Providing and layin in position specified grade of cement concrete for RCC Structure elements unto floor three level including curing, compaction, finishing with rendering in cement sand mortar 1:3 (1 cement ; 3 coarse sand) and making good the joints excluding the cost of centering shuttering and reinforcement forshuttering and reinforcement : M25 grade Design mix						
	TOTAL QTY IN COLUMNS IN GROUND FLOOR					12.16	Cum
	TOTAL QTY IN COLUMNS IN FIRST FLOOR					12.16	Cum
	Qty of Lift and Staircase in Ground Floor					9.92	Cum
	Qty of Lift and Staircase in First Floor					9.92	Cum
	Qty of Lift and Staircase in MUMTY					9.92	Cum
	TOTAL QTY IN BEAMS IN GROUND FLOOR					22.65	Cum
	TOTAL QTY IN BEAMS IN FIRST FLOOR					22.65	Cum
	TOTAL QTY IN SLABS IN GROUND FLOOR					44.35	Cum
	TOTAL QTY IN SLABS IN FIRST FLOOR					44.35	Cum
				Total Qty.		**188.10**	**Cum**
3	Centering & shuttering with plywood or steel sheets including strutting propping, bracing both ways with wooden members and removal of form work for superstructure upto 4.5 Mtr. height above plinth level **(A) For Columns, Pillars, Posts and Struts etc.**						
	Columns C1	245	x 1.80	x 3.00	=	1323.00	Sqm
	Columns C2	97	x 1.20	x 3.30	=	384.12	Sqm
				Total		**1707.12**	**Sqm**
1	Providing and fabrication steel reinforcement for R.C.C. work including cutting, bending, placing in position and binding complete including cost of binding wire in foundations, Raft footing step Beams base of column etc. upto plinth level. Hot rolled deformed (IS : 1139) cold twisted (IS : 1786) bars.						
	Footings	72.03	Cum @	25	Kg/Cum =	1801	Kg
	Basement Wall	306.60	Cum @	150	Kg/Cum =	45990	Kg
	Beams	22.65	Cum @	250	Kg/Cum =	5663	Kg
	Slabs	44.35	Cum @	35	Kg/Cum =	1552	Kg
	Columns	12.16	Cum @	400	Kg/Cum =	4864	Kg
	Beams IN GF	22.65	Cum @	250	Kg/Cum =	5663	Kg
	Slabs IN GF	44.35	Cum @	35	Kg/Cum =	1552	Kg
	Columns IN GF	12.16	Cum @	400	Kg/Cum =	4864	Kg
	Beams IN FF	22.65	Cum @	250	Kg/Cum =	5663	Kg
	Slabs IN FF	44.35	Cum @	35	Kg/Cum =	1552	Kg

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
	Columns IN FF	12.16	Cum @			400	Kg/Cum		=	4864	Kg
						Total				84030	Kg

1 Brick work in superstructure upto 4.5 metre height above plinth level Cement Mortar 1:6 with bricks are class designation 75.

Walls in X direction	1	x	85.79	x	0.23	x	3.60	=	71.03	Cum
Walls in Y direction	1	x	85.79	x	0.23	x	3.60	=	71.03	Cum
Parapet	1	x	73.60	x	0.23	x	0.75	=	12.70	Cum
					Gross Qty.			+	154.76	Cum
Deductions										
D1	63	x	1.20	x	0.23	x	2.10	=	36.51	Cum
D3	3	x	3.00	x	0.23	x	2.10	=	4.35	Cum
W1	222	x	1.80	x	0.23	x	1.20	=	110.29	Cum
V1	9	x	1.20	x	0.23	x	0.60	=	1.49	Cum
V2	295	x	0.90	x	0.23	x	0.60	=	36.64	Cum
0.00	1	x	3.20	x	0.23	x	1.70	=	1.25	Cum
0.00	1	x	3.20	x	0.23	x	1.70	=	1.25	Cum
#REF!	1	x	#REF!	x	0.23	x	1.70	=	#REF!	Cum
#REF!	1	x	#REF!	x	0.23	x	1.70	=	#REF!	Cum
C.C. jali Staircase	2	x	2.40	x	0.23	x	2.40	=	2.65	Cum
Lintels	1	x	171.58	x	0.23	x	0.23	=	9.08	Cum
					Total Deductions			-	#REF!	Cum
Net qty. in First floor			154.76	-	#REF!			**=**	**#REF!**	**Cum**

2 Half brick masonry in super structure using bricks of class designation 75 in Cement Mortar 1:4 (1 cement : 4 coarse sand)

Wall03	1	x	61.57	x	3.60			=	221.65	Sqm
					Gross Qty.			+	221.65	Sqm
Deductions										
D2	10	x	0.75	x	2.10			=	15.75	Sqm
Lintels	1	x	61.57	x	0.15			=	9.24	Sqm
					Total Deductions			-	24.99	Sqm
Net qty. in Ground floor			221.65	-	24.99			**=**	**196.67**	**Sqm**
Total qty. of brick masonry									**196.67**	**Sqm**

3 Centering & shuttering with plywood or steel sheets including strutting propping, bracing both ways with wooden members and removal of form work for superstructure upto 4.5 Mtr. height above plinth level **(A) For Columns, Pillars, Posts and Struts etc.**

Columns C1	245	x	1.80	x	3.00			=	1323.00	Sqm
Columns C2	97	x	1.20	x	3.30			=	384.12	Sqm
					Total				**1707.12**	**Sqm**

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
	(B) For suspended floors, roofs, landing staircases, landing balconies, girders, cantilevers, bands, copings, bed plates, anchor blocks, sills, chajjas etc.										
	Lintels										
	Walls in X direction Except Verandah Walls	2	x	79.39	x	0.23		=		36.52	Sqm
	Walls in Y direction Except Verandah Walls	2	x	#REF!	x	0.23		=		#REF!	Sqm
	Wall03	2	x	61.57	x	0.15		=		18.47	Sqm
	soffits										
	D1	63	x	1.20	x	0.23		=		17.39	Sqm
	D2	3	x	3.00	x	0.23		=		2.07	Sqm
	D3	10	x	0.90	x	0.11		=		0.99	Sqm
	C.C. jali	2	x	1.80	x	0.23		=		0.83	Sqm
	Sunshades										
	W1	222	x	1.80	x	0.83		=		331.67	Sqm
	V1	9	x	1.20	x	0.83		=		8.96	Sqm
	V2	295	x	0.90	x	0.83		=		220.37	Sqm
	Porch	1	x	3.90	x	1.28		=		4.99	Sqm
	Porch	2	x	4.50	x	1.28		=		11.52	Sqm
	Total Shuttering of sunshades in FF			577.51		Sqm					
	Beams										
	Walls in X direction	2	x	85.79	x	0.30		=		51.47	Sqm
		1	x	85.79	x	0.30		=		25.74	Sqm
	Walls in Y direction	2	x	85.79	x	0.30		=		51.47	Sqm
		1	x	85.79	x	0.30		=		25.74	Sqm
	In Rooms	26	x	9.22	x	0.30		=		71.92	Sqm
		52	x	9.22	x	0.75		=		359.59	Sqm
	In Rooms	45	x	9.45	x	0.30		=		127.56	Sqm
		90	x	9.45	x	0.75		=		637.79	Sqm
	In Rooms	22	x	8.08	x	0.30		=		53.31	Sqm
		44	x	8.08	x	0.60		=		213.24	Sqm
	0.00	2	x	3.20	x	0.45		=		2.88	Sqm
		1	x	3.20	x	0.30		=		0.96	Sqm
	0.00	2	x	3.20	x	0.45		=		2.88	Sqm
		1	x	3.20	x	0.30		=		0.96	Sqm
	#REF!	2	x	#REF!	x	0.45		=		#REF!	Sqm
		1	x	#REF!	x	0.30		=		#REF!	Sqm
	#REF!	2	x	#REF!	x	0.45		=		#REF!	Sqm
		1	x	#REF!	x	0.30		=		#REF!	Sqm
	Staircase	4	x	4.80	x	0.45		=		8.64	Sqm
		2	x	4.80	x	0.30		=		2.88	Sqm
	Ent Hall	4	x	3.50	x	0.60		=		8.40	Sqm
		1	x	3.50	x	0.30		=		1.05	Sqm
	Slabs										
	Roof Area (103.10x100.20-85.88x79.71)	1	x	3485.13	x	1.00		=		3485.13	Sqm
	Staircase	2	x	7.20	x	5.00		=		72.00	Sqm
	Staircase flights	4	x	4.25	x	1.80		=		30.60	Sqm
	Staircase landing	2	x	3.50	x	1.80		=		12.60	Sqm
	Porch	1	x	3.60	x	5.00		=		18.00	Sqm
	Area Of Shuttering For Slab in FF			**3618.33**		**Sqm**					
						Total FF				**#REF!**	**Sqm**

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
4	Providing and laying cement concrete and RCC work including curing, compaction, finishing with rendering in cement sand mortar 1:3 (1 cement , 3 : coarse sand) and making good the joints excluding cost of centering and shuttering and reinforcement. 'M-15 grade mix 1:2:4(1:cement, :2- coarse Sand: 4- graded stone aggregate 20 mm nominal size). (A) In suspended floors, roofs, girders, cantilevers, staircases, landings, balconies, bands, copings, bed plates, anchor blocks, sill, and beams etc. upto 4.5 m height above plinth level.										
	Beams										
	Walls in X direction	1	x	713.00	x	0.30	x	0.30	=	64.17	Cum
	Walls in Y direction	1	x	697.15	x	0.30	x	0.30	=	62.74	Cum
	In Rooms	26	x	9.22	x	0.30	x	0.75	=	53.94	Cum
	In Rooms	45	x	9.45	x	0.30	x	0.75	=	95.67	Cum
	In Rooms	22	x	8.08	x	0.30	x	0.60	=	31.99	Cum
	Verandah Wall of Left Wing	1	x	85.88	x	0.45	x	0.30	=	11.59	Cum
	Verandah Wall of Right Wing	1	x	85.88	x	0.45	x	0.30	=	11.59	Cum
	Verandah Wall of Back Wing	1	x	79.71	x	0.45	x	0.30	=	10.76	Cum
	Verandah Wall of Front Wing	1	x	79.71	x	0.45	x	0.30	=	10.76	Cum
	Staircase	2	x	4.80	x	0.45	x	0.30	=	1.30	Cum
	Ent Hall	2	x	3.50	x	0.60	x	0.30	=	1.26	Cum
	Roof Area (103.10x100.20-85.88x79.71)	1	x	3485.13	x	1.00	x	0.13	=	453.07	Cum
	Staircase	2	x	7.20	x	5.00	x	0.13	=	9.36	Cum
	Staircase flights	4	x	4.25	x	1.80	x	0.25	=	7.65	Cum
	Staircase landing	2	x	3.50	x	1.80	x	0.25	=	3.15	Cum
	Porch	1	x	3.60	x	5.00	x	0.15	=	2.70	Cum
							Total in FF			**831.70**	**Cum**
	(B) In Lintels, chajjas, Shelves, vertical and horizontal individually or forming box louvers, bands and facias and fins etc.. upto 4.5 m height above plinth level										
	Lintels										
	Walls in X direction Except Verandah Walls	2	x	79.39	x	0.23	x	0.23	=	8.40	Cum
	Walls in Y direction Except Verandah Walls	2	x	#REF!	x	0.23	x	0.23	=	#REF!	Cum
	Wall03	2	x	61.57	x	0.23	x	0.23	=	6.51	Cum
	Sunshades										
	W1	222	x	1.80	x	0.83	x	0.10	=	33.17	Cum
	V1	9	x	1.20	x	0.83	x	0.10	=	0.90	Cum
	V2	295	x	0.90	x	0.83	x	0.10	=	22.04	Cum
	Porch	1	x	3.90	x	1.28	x	0.10	=	0.50	Cum
	Porch	2	x	4.50	x	1.28	x	0.10	=	1.15	Cum
							Total in FF		=	#REF!	Cum
	(C) In Pillars and Columns in First floor										
	Columns C1	245	x	0.60	x	0.30	x	3.00	=	132.30	Cum

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
	Columns C2	97	x	0.30	x	0.30	x	3.30	=	28.81	Cum
						Total in FF			=	161.11	Cum
5	Providing and fabrication steel reinforcement for R.C.C. work including cutting, bending, placing in position and binding complete including cost of binding wire in foundations, Raft footing step Beams base of column etc. upto plinth level. Hot rolled deformed (IS : 1139) cold twisted (IS : 1786) bars.										
	Lintels	#REF!	Cum @			75	Kg/Cum		=	#REF!	Kg
	Slabs & Beams	831.70	Cum @			100	Kg/Cum		=	83170	Kg
	Columns	161.11	Cum @			125	Kg/Cum		=	20139	Kg
						Total				#REF!	Kg
6	Plaster on new surface on walls in cement sand mortar 1:6 including raking of joints etc. complete fine finished : 20 mm thick.										
	GROUND FLOOR INSIDE PLASTER										
	Main Walls	2	x	#REF!	x	3.60			=	#REF!	Sqm
	Partition Walls	2	x	196.67	x	1.00			=	393.33	Sqm
						Gross Qty.			+	#REF!	Sqm
	Deductions										
	D1	63	x	1.20	x	2.10			=	158.76	Sqm
	D2	3	x	3.00	x	2.10			=	18.90	Sqm
	D3	10	x	0.90	x	2.10			=	18.90	Sqm
	W1	222	x	1.80	x	1.20			=	479.52	Sqm
	External plaster	1	x	#REF!	x	1.00			=	#REF!	Sqm
						Total Deductions			-	#REF!	Sqm
	Net qty. of Internal Plaster in FF			#REF!	-	#REF!			**=**	**#REF!**	Sqm
	Second FLOOR INSIDE PLASTER										
	Staircase	4	x	8.40	x	3.00			=	100.80	Sqm
	Parapet	2	x	73.60	x	0.75			=	110.40	Sqm
						Gross Qty.			+	211.20	Sqm
	Deductions										
	Staircase	2	x	1.20	x	2.10			=	5.04	Sqm
	Jali	2	x	1.80	x	2.40			=	8.64	Sqm
						Total Deductions			-	13.68	Sqm
	Net qty. of Internal Plaster in FF			211.20	-	13.68			**=**	**197.52**	Sqm
	Net qty. of Internal Plaster in All floors			#REF!	+	197.52			**=**	**#REF!**	Sqm
	External plaster										
		2	x	103.10	x	4.35			=	896.97	Sqm
		2	x	100.20	x	4.35			=	871.74	Sqm
		2	x	79.71	x	4.35			=	693.48	Sqm
		2	x	85.88	x	4.35			=	747.16	Sqm
						Gross qty. of External Plaster (+)			=	3209.34	Sqm
	Deductions										
	Verandah Sum of all walls	1	x	#REF!	x	1.70			=	#REF!	Sqm
						Total Deductions			-	#REF!	Sqm
	Net qty. of External Plaster in FF			3209.34	-	#REF!			**=**	**#REF!**	Sqm
	Total qty. of Plaster			#REF!	+	#REF!			**=**	**#REF!**	Sqm

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
7	Providing and fixing T-iron/angle iron frames for doors windows and ventilators of mild steel tee or angle sections joints mitered and welded with 15 x 3 mm lugs, 10 cm. long embedded in cement concrete blocks 15x15x10 cm. size of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips and screws or with bolt and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved										
	D1	63	x(	1.50	+	2.15	+	2.15	)=	436.83	RM
	D2	10	x(	1.20	+	2.15	+	2.15	)=	55.47	RM
						Total				492.30	RM
				492.30	RM			@ 4.15	Kg/m	2043.03	Kg
8	Providing and fixing steel glazed doors windows and ventilator shutters of standard rolled steel section joints mitered and welded with steel lugs 13x3 mm, 10 cm long embedded in cement concrete block 15x10x10 cm. of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or with fixing clips and screws or with bolt and nuts as required including providing & fixing of plain glass panes 3 mm thick with glazing clips and special metals sash putty of approved make or metal beading with screws complete including priming coat of approved steel primer excluding cost of metal beading and other fixing except necessary hinges of pivots steel handles peg stay etc. as required (Partly Fixed Partly Openable)										
	W1	222	x	1.80	x	1.20			=	479.52	Sqm
	V1	9	x	1.20	x	0.60			=	6.48	Sqm
	V2	295	x	0.90	x	0.60			=	159.30	Sqm
						Total				645.30	Sqm
9	Providing and fixing square bars or other flat welded to window, ventilators etc.										
	W1	222	x	1.80	x	10	@	1.13	=	4515.48	Kg
	V1	9	x	1.20	x	4	@	1.13	=	48.82	Kg
	V2	295	x	0.90	x	4	@	1.13	=	1200.06	Kg
						Total				**5764.36**	Kg

S.N.	Particulars	Nos.		Length		Breadth	Height	Qty.	Units
10	Supplying and fixing wire gauge of 14 mesh x 24 gauge to the metal frame of rolled section by metal beading 20 x 3 mm with suitable screw at not exceeding 150 mm distance.								
	Qty. 10% of total windows area			645.30	x	**0.10**		**64.53**	Sqm
11	Supplying and fixing in cement mortar welded hand railing made out of MS round or square bars flats. etc. for staircase or verandah as per design complete in all respect (wooden or PVC hand railing to be paid extra) with priming coat of red oxide.								
	20 mm Square bar	72	x	1.20	@	3.14	=	271.30	Kg
		72	x	0.05	@	3.14	=	11.30	Kg
	Flat 50x5 mm	3	x	9.45	@	1.96	=	55.64	Kg
						Total		**338.24**	Kg
12	Polished Blue Kota stone flooring skirting laid over 20 mm thick base CM 1:4 and jointed with Grey cement slurry to match the shade of the slab including rubbing and polishing complete								
	Floor Area (103.10x100.20-85.88x79.71)	1.00	x	3485.13	x	1.00	=	3485.13	Sqm
	Staircase	2.00	x	7.20	x	5.00	=	72.00	Sqm
	Staircase flights	4	x	4.25	x	1.80	=	30.60	Sqm
	Staircase landing	2	x	3.50	x	1.80	=	12.60	Sqm
	Porch	1	x	3.60	x	5.00	=	18.00	Sqm
	Steps	14	x	3.00	x	0.30	=	12.60	Sqm
						Total		**3630.93**	Sqm
	(b) for area of each slab from 2001 to 5000 sq. cm 25 mm thick slab.								
	Staircase flights	4	x	4.25	x	1.80	=	30.60	Sqm
	Staircase landing	2	x	3.50	x	1.80	=	12.60	Sqm
	Porch	1	x	3.60	x	5.00	=	18.00	Sqm
	Steps	14	x	3.00	x	0.30	=	12.60	Sqm
						Total		**73.80**	Sqm

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
13	Providing and fixing fully panelled double leaf shutter for doors as per approved design and drawings with approved ordinary C.P./oxidised steel fittings as per Annexure `A' and width of styles & top rails of 100 mm and bottom & lock rails width of 150 mm and intermediate styles including teak wood mouldings and beading to 25x5 mm size on both face complete . Assam teak wood grade I 35 mm thick . 12 mm thick shuttering ply (Kit ply make) both faces panels.										
	D1	63	x	1.20	x	2.10		=		158.76	Sqm
						Total				**158.76**	Sqm
14	Providing and fixing fully panelled Single leaf shutter for doors as per approved design and drawings with approved ordinary C.P./oxidised steel fittings as per Annexure `A' and width of styles & top rails of 100 mm and bottom & lock rails width of 150 mm and intermediate styles including teak wood mouldings and beading to 25x5 mm size on both face complete . Assam teak wood grade I 35 mm thick . 12 mm thick shuttering ply (Kit ply make) both faces panels.										
	D2	10	x	0.90	x	2.10		=		18.90	Sqm
						Total				**18.90**	Sqm
15	White washing with lime to give an even shade including all scaffolding: New work (two or more coats).										
	Qty. of Internal Plaster							=		#REF!	Sqm
	Qty. of Sunshade shuttering	2	x	577.51				=		1155.02	Sqm
	Qty. of Slab shuttering							=		3618.33	Sqm
						Total				#REF!	Sqm
16	Colour washing of all shades to give an even shade including all scaffolding: New work (two or more coats) with a base coat of white washing with lime.										
	Qty. of External Plaster	1	x	3209.34				=		3209.34	Sqm
						Total				3209.34	Sqm
17	Applying priming coat with ready mix pink or Grey primer of approved brand and manufacture on wood work hard and soft wood.										
	Double Leaf door shutters	158.76	Sqm				@	2.25	=	357.21	Sqm
	Single Leaf door shutters	18.90	Sqm				@	2.25	=	42.53	Sqm

S.N.	Particulars	Nos.		Length		Breadth		Height		Qty.	Units
	Windows			645.30		Sqm	@	2.60	=	1677.78	Sqm
	Collapsible shutters	3	x	3.00	x	2.40	@	2.00	=	43.20	Sqm
	Railing	3	x	9.45	x	1.00	@	1.00	=	28.35	Sqm
								Total	=	**2149.07**	Sqm
18	Painting with enamel paint of approved brand and manufacture to give an even shade two or more coats on new work.										
	Qty. of priming									**2149.07**	Sqm
19	Providing and fixing in position Collapsible steel shutters with vertical M.S. channels 20 x 10 x 2 mm and bracket with flat iron diagonals 20 x 5 mm size with top and bottom rail of T-iron 40 x 40 x 6 mm with 40 mm Dai steel pulleys/ball bearing complete with bolts, nuts locking arrangements inside and outside stoppers, handles etc. as per specifications including applying of a priming coat of approved steel primer.(To be measured and paid as per outer dimension). With 75 mm opening when closed.										
	Collapsible shutters	3	x	3.00	x	2.40			=	21.60	Sqm
									Total =	**21.60**	Sqm
20	Providing brick kharanja in cement sand mortar 1 : 4 in square pattern over roof of ground floor 75 to 100 mm thick average.										
	Floor Area (103.10x100.20-85.88x79.71)	1.00	x	3485.13	x	1.00			=	3485.13	Sqm
	Staircase	2.00	x	7.20	x	5.00			=	72.00	Sqm
	Porch	1	x	3.60	x	5.00			=	18.00	Sqm
						Total				**3575.13**	Sqm
21	Spreading of hot blown bitumen (IS grade 85/25, 90/25 industrial grade) applied at 175 to 180 C @ rate of 1.75 Kg. per Sqm. complete.			Qty. same as Brick Kharanja					=	3575.13	Sqm
22	Providing batta (gola) 75 mm x 75 mm in cement concrete (1 :2 :4) including finishing with cement mortar 1 : 3 as per standard design.										
	@' 0.25 M per Sqm of Kharanja			3575.13		@' 0.25 M per Sqm			=	893.78	Sqm

S.N.	Particulars	Nos.		Length		Breadth	Height		Qty.	Units
23	Finishing with 25 mm thick cement plaster on roofs in cement sand mortar 1:4 mix including water proofing compound @ 2% of cement used with neat cement finishing, curing etc. complete in all respects.			Qty. same as Brick Kharanja				=	3575.13	Sqm
24	Providing and fixing 20 mm thick terrazzo tile over roofing fixed in cement mortar 1 : 4.			Qty. same as Brick Kharanja				=	3575.13	Sqm
25	P&F 1st quality white glazed tiles of approved make and size (Somani, Johnson etc.) 5 mm thick in wall, floors, steps, pillars etc. laid on bed of neat cement slurry finished with flush pointing in white cement (excluding the cost of cement plaster).									
	Laboratory 11 x 5	55	x	18.00	x	1.80		=	1782.00	Sqm
	Toilets	3	x	2.70	x	1.50		=	12.15	Sqm
	Urinal Floor	4	x	1.20	x	0.75		=	3.60	Sqm
	Toilet	2	x	5.25	x	0.90		=	9.45	Sqm
							Total	=	**1807.20**	Sqm
26	Providing and fixing on wall face Asbestos Cement rain water pipe including jointing with spun yarn soaked in Bitumen and Cement Mortar 1 : 2 (1 Cement : 2 Coarse Sand) complete including MS clamp: 100 mm dia.	360	x	0.60				=	216.00	RM
							Total	=	**216.00**	RM
27	Providing and fixing precast cement concrete coping 1:2:4 mix 50 mm thick complete as per specification 50 mm thick.									
	Coping FF Parapet	1	x	#REF!	x	0.32		=	#REF!	Sqm
							Total	=	#REF!	Sqm
28	Dismantling stone rubble masonry including stacking of serviceable material and disposal of unserviceable material within 50 m lead; In lime mortar									
	For Columns 2x(245+97)	684	x	0.30	x	0.23	0.75	=	35.40	Cum
							Total		**35.40**	Cum

S.N.	Particulars	Nos.		Length	Breadth	Height		Qty.	Units
29	Providing, laying and fixing in position RCC Spun or Hume pipe ISI marked with proper joints in required slope, packed in the gasket of hume pipe or spun yarn and neatly finished with rich grout of cement mortar 1 : 3 (1 cement : 3 sand) and made perfectly air and water tight including testing of joints, for 150 mm Dia. NP3 pipe	2	x	15.00			=	30.00	RM
	NON BSR ITEM								
30	P & F glass boards	1	x	27.00			=	27.00	Nos.

CHARTERED ENGINEER,
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