

ESTIMATE OF FOREST CHOWKI

(Total Area = 2016 sq. ft. + Court Yard 487 sq. feet)

1. C/C length of walls in Chowki = $41.25 \times 4 + 47.25 \times 2 + 15.5 \times 1$ running feet
= 275 running feet
= 83.82 running meter
2. C/C length of court yard walls = $13.5 \times 2 + 31.5 \times 1$ running feet
= 58.5 running feet
= 17.83 running meter
3. No. of columns in chowki = 20
4. No. of columns in courtyard = 4
5. Size of each column = 9 inches x 9 inches
6. Plinth = 0.5 meter above ground level
7. Beam at plinth level = 9 inches x 9 inches
8. Beam at door level = 9 inches x 6 inches
9. Beam at roof level = 9 inches x 9 inches
10. Thickness of slab = 4 inches

Estimate of different works

1. Excavation:

- (i) For columns = $(20 + 4) \times 1.0 \times 1.0 \times 1.2$ meter
= 28.800 cubic meter
- (ii) For walls = $[(83.82 + 17.83) - 61 \times 0.5] \times 0.3 \times 0.5$
= 10.672 cubic meter
- (iii) For Pavement block = $15 \times 3 \times 0.45 = 20.25$ cum
- (iv) Total excavation = 39.472 cubic meter + 20.25 cum
= 59.722

2. Filling foundation with 1:3:6 (M-10) cement concrete:

- (i) For columns = $(20 + 4) \times 1.0 \times 1.0 \times 0.1$
= 2.4 cubic meter
- (ii) For walls = $(83.82 + 17.83) \times 0.3 \times 0.1$
= 3.049 cubic meter
- (iii) For flooring in rooms = $14.63 \times 12.80 \times 0.1$
= 18.726 cubic meter
- (iv) Total CC = 24.175 cubic meter

3. R.C.C. work in 1:1.5:3 (M-20) in columns, beams, chajjas & slab:

- (i) Columns footing = $24 \times (1 \times 1 + 0.22 \times 0.22) / 2 \times 0.3$
= 3.774 cubic meter
- (ii) Columns up to plinth level = $24 \times 1.2 \times 0.22 \times 0.22$
= 1.394 cubic meter
- (iii) Column up to roof level = $20 \times 0.22 \times 0.22 \times 3.1$
= 3.00 cubic meter
- (iv) Column in court yard = $4 \times 0.22 \times 0.22 \times 1.8$
= 0.348 cubic meter
- (v) Beam at plinth level = $(83.82 + 17.83) \times 0.22 \times 0.22$
= 4.914 cubic meter
- (vi) Beam at door level = $83.82 \times 0.22 \times 0.15$
= 2.766 cubic meter
- (vii) Beam at roof level = $83.82 \times 0.22 \times 0.22$
= 4.056 cubic meter
- (viii) Chajjas = $10 \times 0.6 \times 1.5 \times 0.1$
= 0.90 cubic meter
- (ix) Slab = $(14.63 \times 12.80) \times 0.1$
= 18.726 cubic meter
- (x) Total RCC = 39.878 cubic meter

4. **Steel required in RCC** = 1.50 % of volume of RCC
= 4695 kg
5. **Masonry in foundation/plinth** = $(83.82 + 17.83) \times 0.22 \times 0.9$
= 20.127 cubic meter
6. **Masonry in superstructure:**
- (i) In main building = $83.82 \times 0.22 \times 2.85$
= 52.555 cubic meter
- (ii) In courtyard = $17.83 \times 0.22 \times 1.8$
= 7.061 cubic meter
- (iii) Deduction for doors/windows = $(4 \times 1.07 \times 2.1 + 8 \times 0.838 \times 2.1 + 9 \times 1.5 \times 1.35 + 1 \times 1.2 \times 1.35 + 3 \times 0.6 \times 0.45) \times 0.22$
= 9.619 cubic meter
- (iv) Total Masonary = 49.997 cubic meter
7. **Plaster in 1:6 cement mortar**
- (i) In main building = $2 \times 83.82 \times 3.0$
= 502.92 square meter
- (ii) In courtyard = $2 \times 17.83 \times 1.8$
= 64.188 square meter
- (iii) In roof = 12.80×14.63
= 187.264 square meter
- (iv) Deduction for doors/windows = $2 \times (4 \times 1.07 \times 2.1 + 8 \times 0.838 \times 2.1 + 9 \times 1.5 \times 1.35 + 1 \times 1.2 \times 1.35 + 3 \times 0.6 \times 0.45)$
= 87.445 square meter
- (vi) Total plaster = 479.663 square meter

8. Centering and shuttering:

- (i) For Columns in main building = $20 \times 4 \times 0.22 \times 4.6$
= 80.96 square meter
- (ii) For columns in courtyard = $4 \times 4 \times 0.22 \times 3.3$
= 11.616 square meter
- (iii) For beam at plinth level = $(83.82 + 17.83) \times 0.3$
= 30.495 square meter
- (iv) For beam at door level = 83.82×0.525
= 44.005 square meter
- (iv) For beam at roof level = 83.82×0.66
= 55.321 square meter
- (v) For chajjas = $10 \times 0.6 \times 1.5$
= 9.00 square meter
- (vi) For slab = 14.63×12.80
= 187.264 square meter
- (vii) Total shuttering = 418.661 square meter

9. Filling foundation with moorum /stone dust

$$= 14.63 \times 12.80 \times 0.5 + 20.25$$

$$= 113.88 \text{ cubic meter}$$

10. Wood required for frames

$$= 0.0635 \times 0.127 \times (4 \times 5.334 + 8 \times 5.105 + 9 \times 8.534 + 1 \times 5.4 + 6 \times 2.1)$$

$$= 1.266 \text{ cubic meter}$$

11. Frame work for doors/window

$$= (4 \times 1.07 \times 2.1 + 8 \times 0.838 \times 2.1 + 9 \times 1.5 \times 1.35 + 1 \times 1.2 \times 1.35 + 3 \times 0.6 \times 0.45)$$

$$= 43.722 \text{ square meter}$$

12 Flooring

$$= 14.63 \times 12.80$$

$$= 187.264 \text{ square meter}$$

13 Paver block (in front)

$$= 45 \text{ sqm.}$$

Estimate of expenditure for Forest Chouki

Sr.	CSR item no.	Description of the work	Quantity	Rate in Rs.		Amount
				Amount	Unit	
1	2.2, page 22	Clearing jungle including uprooting of rank vegetation, grass, brush wood etc	320	4.14	Sqm	1325
2	2.6., page 22	Earth work in excavation in all kinds of soil	59.722	129.00	Cum	7704
3	4.1.1.4, page 45	Filling foundation- Providing and laying in position cement concrete of M-10 grade with 20 mm nominal size graded stone aggregate	24.175	3890.00	Cum	94041
4	5.1.1, page 65	Providing and laying in position M-20 grade of reinforced cement concrete with 20 mm nominal size graded stone aggregate excluding cost of centering/shuttering/steel	39.878	6153.00	Cum	245369
5	5.16.6, page 68	Reinforcement for RCC work including straightening, cutting, bending etc with TMT bars	4695	80.00	Kg	375600
6	6.5.2, page 85	Brick work with well burnt open bhatta bricks with crushing strength no less than 25 kg/sq.cm and absorption not more than 20% in 1:6 cement mortar	20.127	4155.00	Cum	83628
7	6.6.2, page 86	Brick work with well burnt chimney bricks with crushing strength no less than 25 kg/sq.cm and absorption not more than 20% in 1:6 cement mortar	49.997	4350.00	Cum	217487
8	13.2.2, page 244	15 mm thick plaster in 1:6 cement mortar	479.663	128.00	Sqm	61397
9	5.9.1, page 66	Centering and shuttering including removal in beams, columns, slab etc	418.661	190.60	Sqm	79797
10	2.28, page 26	Supplying and filling in plinth with hard moorum including ramming, watering etc	93.632	672.00	Cum	62921
11	9.1.2, page 131	Providing wood work in frames of doors/windows and fixed in position with sal wood	1.266	71309.00	Cum	90277

Sr.	CSR item no.	Description of the work	Quantity	Rate in Rs.		Amount
				Amount	Unit	
12	9.5.2.2,	Providing and fixing panelled shutters for doors with prelaminated board with decorative lamination on one side and balancing lamination on other side.	43.722	1956.00	Sqm	85520
13	11.78.1.1	Providing and laying vitrified floor tiles laid on 20 mm thick cement mortar in 1:4 with 600 mmx 600mm x 9mm size tiles (additional 10 % for skirting)	205.26	1104.00	Sqm	226607
	11.66	Concrete interlocking paver block in front of building	45	586.00	Sqm	26370
15		Cost of window grills as per market rate	450	80.00	Kg	36000
16		Aluminium window frame 3 track sliding (2Glass+1 Mosquito mesh shutter) & fly proof outer doors (2 Nos)	LS			70000
17		Cost of septic tank of size 6` feet x 6 feet x 6 feet; 1 no.	LS			40000
18		Miscellaneous Expnese-granite platform in kitchen etc.	LS			20000
		Total				1824042
19		Add 5% for electrification				91202
20		Add 5% for sanitary fittings including 1500 liter tank				91202
21		Add for tile work in bath/toilets	LS			60000
22		Add 5% for white washing (with 2 coats of cement based putty				91202
23		Add for Armouary almirah	LS			65000
24		Add for furniture & utencils etc.	LS			100000
25		Add for the cost of 08 kota stone covered almirah of size 7 feet				120000
26		Add for coverd shade in court yard with flagstone flooring	LS			40000
27		Add for parapet wall and stair case	LS			80000
		Total				2562649
28		Add for GST	18.00%			461277
		Total				3023926

Sr.	CSR item no.	Description of the work	Quantity	Rate in Rs.		Amount
				Amount	Unit	
29		Add 1% for labour welfare tax				30239
		Grand Total				3054165
		Provision for Boundarywall (100 rmt)				400000
		Grand Total				3454165

or 3460000

Rs. Thirty four Lakhs Sixty thousand Only

महेंद्र सिंह धाकड़
मुख्य कार्यपालन अधिकारी (कैम्पा)
मध्यप्रदेश, भोपाल

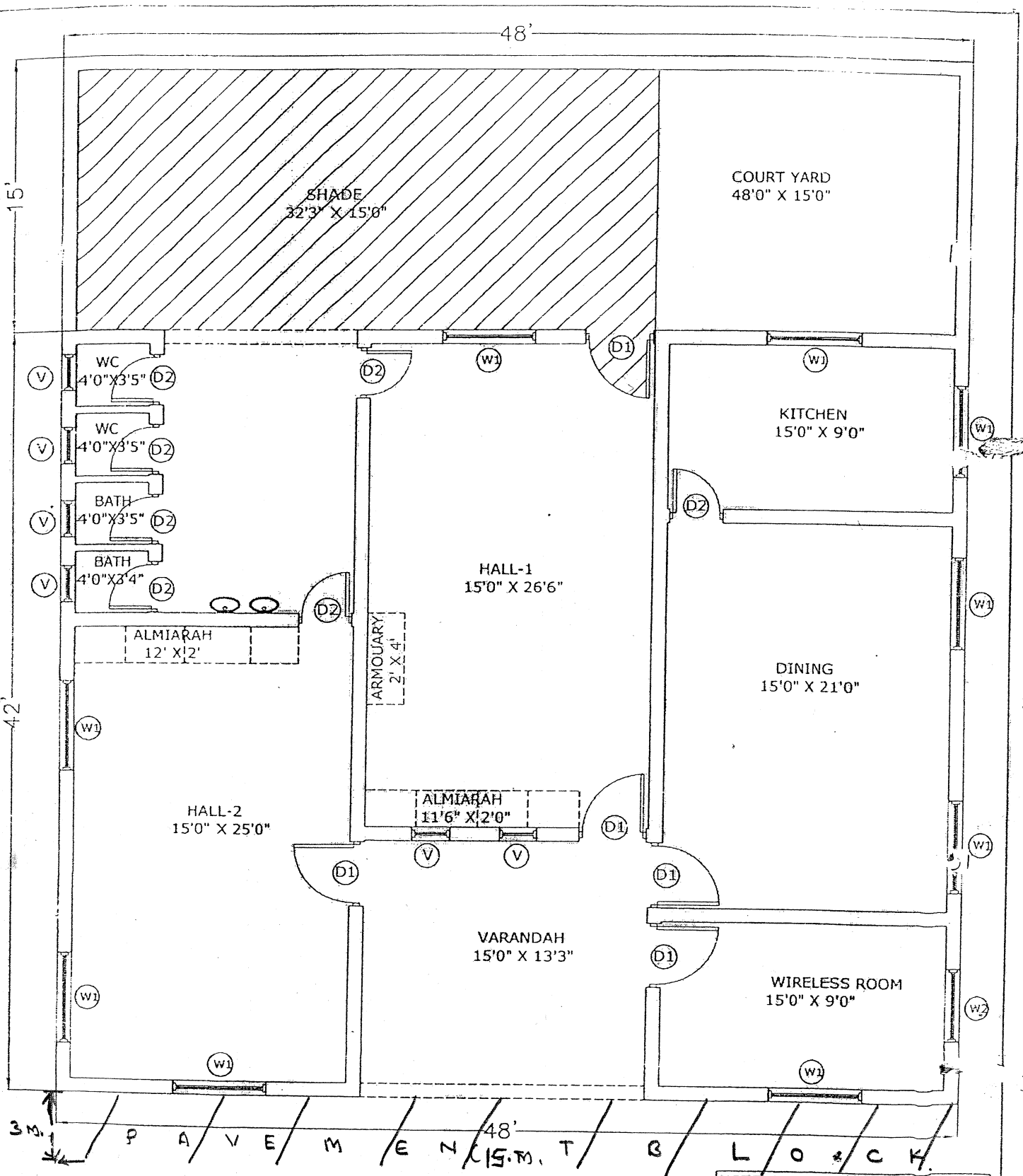
राजेश खरे
वन संरक्षक, भोपाल

यूके० सुबुद्धि 15/3/2023
अपर प्रधान मुख्य वन संरक्षक
(विकास), मध्यप्रदेश, भोपाल

सुनील अग्रवाल
प्रधान मुख्य वन संरक्षक
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PLAN OF FOREST CHOWKI

SIZE - 48'0" X 42'0" = 2016.0 SQFT.+ COURT YARD

NOTE- WALL THICKNESS 9" & 4.5"

SPECIFICATION OF DOOR & WINDOW

D1	3'6" X 7'0"	= 4 NOS.
D2	2'9" X 7'0"	= 3 NOS.
W1	5'0" X 4'6"	= 9 NOS.
W2	4'0" X 4'6"	= 1 NOS.
V	2'0" X 1'6"	= 6 NOS.

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Estimate of Quantities of Forest Chowki

Sr.	Description of the work	Quantity	Cement (bag)	Sand (cu m)	Aggregate (cu m)	Brick	Steel in kg	Stone dust (cu m)
1	M-10 grade CC	24.175 cu.m	103	11.024	22.048	0	0	0
2	M-20 CC	39.878 cu.m	309	16.531	33.062	0	0	0
3	Steel	4695 kg	0	0	0	0	4695	0
4	Brick work	70.124 cu.m	131	28.05	0	45580	0	0
5	Plaster	479.663 sq.m	45	9.593	0	0	0	0
6	Hard moorum/ Stone dust	93.632 cu.m	0	0	0	0	0	93.632
7	Tiles flooring	205.26 sqm	88	8.8				
	Total		676	73.998	55.11	45580	4695	93.632