

ESTIMATE OF CF/DCF RESIDENCE

(Total Area = 2251 sq. ft. + Courtyard 600 sq.ft, Porch 300 sq.ft)

1. C/C length of walls = $46.25 \times 2 + 42.25 \times 1 + 12.75 \times 4 + 17.00 \times 1 + 48.25 \times 4 + 7.75 \times 1$ running feet
= 403.51 running feet
= 122.99 running meter
2. C/C length of court yard wall = $46.25 \times 1 + 12.4 \times 2$
= 71.05 running feet
= 21.66 running meter
3. No. of columns = 38
4. Size of each column = 26 nos. of size 12 inches x 9 inches
= 12 nos. of size 9 inches x 9 inches
5. Plinth = 0.5 meter above ground level
6. Beam at plinth level = 9 inches x 9 inches
7. Beam at door level = 9 inches x 6 inches
8. Beam at slab level = 9 inches x 12 inches
9. Thickness of slab = 4 inches

Estimate of different works

1. Excavation:

- (i) For columns = $38 \times 1.0 \times 1.0 \times 1.2$ meter
= 45.600 cubic meter
- (ii) For walls = $(122.99 + 21.66 - 76 \times 0.5) \times 0.3 \times 0.5$
= 15.997 cubic meter
- (iii) Total excavation = 61.597 cubic meter

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

- (i) For columns = $38 \times 1.0 \times 1.0 \times 0.1$
= 3.800 cubic meter
- (ii) For walls = $(122.99 + 21.66) \times 0.3 \times 0.1$
= 4.339 cubic meter
- (iii) For flooring in rooms = 209.395×0.1
= 20.939 cubic meter
- (iv) Total CC = 29.078 cubic meter

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

- (i) Columns footing = $26 \times (1 \times 1 + 0.30 \times 0.22) / 2 \times 0.3$
+ $12 \times (1 \times 1 + 0.22 \times 0.22) / 2 \times 0.3$
= 6.044 cubic meter
- (ii) Columns up to plinth level = $26 \times 1.2 \times 0.30 \times 0.22 +$
 $12 \times 1.2 \times 0.22 \times 0.22$
= 2.756 cubic meter
- (iii) Column up to roof level = $26 \times 3.1 \times 0.30 \times 0.22 +$
 $6 \times 3.1 \times 0.22 \times 0.22 +$
 $6 \times 1.8 \times 0.22 \times 0.22$
= 6.742 cubic meter
- (iv) Beam at plinth level = $(122.99 + 21.66) \times 0.22 \times 0.22$
= 7.001 cubic meter
- (v) Beam at door level = $122.99 \times 0.22 \times 0.15$
= 4.059 cubic meter
- (vi) Beam at slab level = $122.99 \times 0.22 \times 0.30$
= 8.117 cubic meter
- (vii) Chajjas = $8 \times 0.6 \times 1.5 \times 0.1$
= 0.720 cubic meter
- (viii) Slab = 209.395×0.1
= 20.939 cubic meter
- (ix) In stair case = $10 \times 1.20 \times 0.1$
= 1.200 cubic meter
- Total RCC = 57.578 cubic meter

4. **Steel required in RCC** = 1.50 % of volume of RCC
= 6780 kg
5. **Masonry in foundation/plinth** = $(122.99 + 21.66 - 38 \times 0.22) \times 0.22 \times 0.9$
= 26.985 cubic meter
6. **Masonry in superstructure:**
- (i) In main building/courtyard = $122.99 \times 0.22 \times 2.80 + 21.66 \times 0.22 \times 1.8$
= 84.339 cubic meter
- (ii) Deduction for doors/windows = $(6 \times 1.07 \times 2.1 + 7 \times 0.838 \times 2.1 + 3 \times 1.5 \times 1.35 + 4 \times 1.2 \times 1.35 + 1 \times 2.1 \times 2.1 + 6 \times 0.6 \times 0.45) \times 0.22$
= 9.765 cubic meter
- (iii) Masonry in parapet = $57.30 \times 0.75 \times 0.22$
= 9.454 cubic meter
- (iv) Masonry in staircase tower = $2 \times (5.03 + 2.59) \times 2.1 \times 0.22$
= 7.041
- (v) Total Masonary = 91.069 cubic meter
7. **Plaster in 1:6 cement mortar**
- (i) In main building/courtyard = $2 \times 122.99 \times 3.3 + 2 \times 21.66 \times 1.8$
= 889.71 square meter
- (ii) In parapet wall = $2 \times 57.30 \times 0.75$
= 85.95 square meter
- (iii) In roof = 209.395 sq. m
- (iii) Deduction for doors/windows = $2 \times (6 \times 1.07 \times 2.1 + 7 \times 0.838 \times 2.1 + 3 \times 1.5 \times 1.35 + 4 \times 1.2 \times 1.35 + 1 \times 2.1 \times 2.1 + 6 \times 0.6 \times 0.45)$
= 88.770 square meter
- (iv) Total plaster = 1096.285 square meter

8. Centering and shuttering:

(i) For Columns	$= 26 \times 1.07 \times 4.6 + 6 \times 0.88 \times 4.6$ $6 \times 4 \times 0.22 \times 3.3$ $= 169.684$ square meter
(ii) For beam at plinth level	$= (122.99 + 21.66) \times 0.3$ $= 43.395$ square meter
(iii) For beam at door level	$= 122.99 \times 0.525$ $= 64.569$ square meter
(v) For beam at roof level	$= 122.99 \times 0.96$ $= 118.070$ square meter
(vi) For chajjas	$= 8 \times 0.6 \times 1.5$ $= 7.200$ square meter
(vii) For slab	$= 209.395$ sq. m
(viii) Total shuttering	$= 612.313$ square meter

9. Filling foundation with moorum $= 209.395 \times 0.5$

$$= 104.697 \text{ cubic meter}$$

10. Wood required for frames

$$= 0.0635 \times 0.127 \times (6 \times 5.334 + 7 \times 5.105 + 3 \times 8.534 + 4 \times 5.4 + 1 \times 8.4 + 6 \times 2.1)$$
$$= 1.096 \text{ cubic meter}$$

11. Frame work for doors/window

$$= (6 \times 1.07 \times 2.1 + 7 \times 0.838 \times 2.1 + 3 \times 1.5 \times 1.35 + 4 \times 1.2 \times 1.35 + 1 \times 2.1 \times 2.1 + 6 \times 0.6 \times 0.45)$$
$$= 44.385 \text{ square meter}$$

12 Flooring

$$= 209.395 \text{ square meter}$$

Estimate of expenditure for CF/DCF Residence (FOREST)

Sr.	CSR item no.	Description of the work	Quantity	Rate in Rs.		Amount
				Amount	Unit	
1	2.2	Clearing jungle including uprooting of rank vegetation, grass, brush wood etc	350	4.14	Sqm	1449
2	2.6.	Earth work in excavation in all kinds of soil	61.597	129.00	Cum	7946
3	4.1.1.4	Filling foundation- Providing and laying in position cement concrete of M-10 grade with 20 mm nominal size graded stone aggregate	29.078	3890.00	Cum	113113
4	5.1.1	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	57.578	6153.00	Cum	354277
5	5.16.6	Reinforcement for RCC work including straightening, cutting, bending etc with TMT bars	6780	80.00	Kg	542400
6	6.5.2	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	26.985	4155.00	Cum	112123
7	6.6.2	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	91.069	4350.00	Cum	396150
8	13.2.2	15 mm thick plaster in 1:6 cement mortar	1096.85	128.00	Sqm	140397
9	5.9.1	Centering and shuttering including removal in beams, columns, slab etc	612.313	190.60	Sqm	116707
10	2.26	Supplying and filling in plinth with Stone dust including ramming, watering etc	104.697	672.00	Cum	70356
11	9.1.2	Providing wood work in frames of doors and fixed in position with sal wood	1.096	71309.00	Cum	78155
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	44.385	1956.00	Sqm	86817

Sr.	CSR item no.	Description of the work	Quantity	Rate in Rs.		Amount
				Amount	Unit	
13	11.78.1.1	Providing and laying vitrified floor tiles laid on 20 mm thick cement mortar in 1:4 with 600 mm x 600 mm x 9 mm size tiles (additional 10% for skirting)	209.395	1104.00	Sqm	231172
14		Cost of window grills (As per market rate)	340	80.00	Kg	27200
15		Aluminium window frame 3 track sliding (2 Glass+ 1 Mosquito mesh shutter) and fly proof outer doors	LS			80000
16		Cost of septic tank of size 6 feet x 6 feet x 6 feet; 1 no.	LS			40000
		Total				2398263
17		Add 5% for electrification				119913
18		Add 5% for sanitary fittings including 1500 liter tank				119913
19		Add for tile work in bath/toilets	LS			80000
20		Add 7% for white washing (with 2 coats of cement based putty and emulsion				167878
21		Add for covered shade in court yard with flagstone flooring	LS			40000
22		Add for almirah (one each in bedroom, one in kitchen, one in dining room) 5nos.				70000
23		cost of 3 gysars, 10 fans				60000
24		Add for modular kitchen alongwith granite platform with vertical support & ss sink				125000
25		Add for railing of staircase/varandah				40000
26		Add for 300 sq.ft porch				120000
27		Miscellenus Expences				20000
		Total				3360967
28		Add for GST	18.00%			604974
		Total				3965941
29		Add 1% for labour welfare tax				39659
		Total				4005601
30		Provision for Garage (300 sqft)				350000

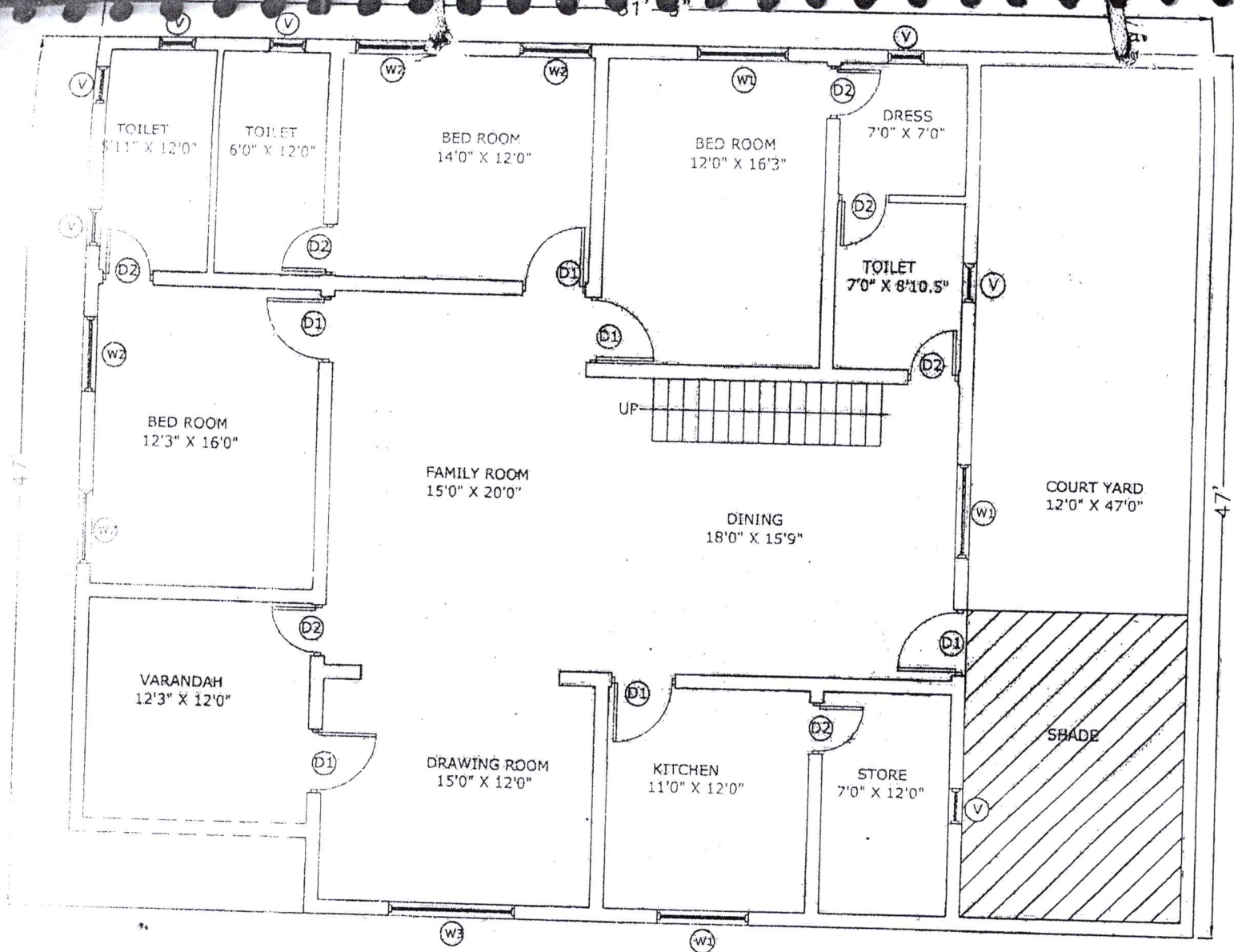
Sr.	CSR item no.	Description of the work	Quantity	Rate in Rs.		Amount
				Amount	Unit	
31		Provision for Boundarywall (100 rmt)				400000
		Grand total				4755601

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

राजेश खरे
वन संरक्षक, भोपाल

यू.के. सुबुद्धि
अपर प्रधान मुख्य वन संरक्षक
(विकास), मध्यप्रदेश, भोपाल

सुनील अग्रवाल
प्रधान मुख्य वन संरक्षक (कैम्पा),
मध्यप्रदेश, भोपाल



NOTE- WALL THICKNESS 9" & 4.5"

SPECIFICATION OF DOOR & WINDOW

D1- 3'6" X 7'0"	= 6NOS.
D2- 2'9" X 7'0"	= 7NOS.
W1- 5'0" X 4'6"	= 3NOS.
W2- 4'0" X 4'6"	= 4NOS.
W3- 7'0" X 7'0"	= 1NOS.
V- 2'0" X 1'6"	= 6NOS.

PLAN OF CF / DCF RESIDENCE
 SIZE = 2251.0 SQFT. + COURT YARD

181

10

95

65