

GOVERNMENT OF WEST BENGAL
PANCHAYATS & RURAL DEVELOPMENT DEPARTMENT
9TH FLOOR, JOINT ADMINISTRATIVE BUILDING
BLOCK HC, PLOT 7, SECTOR – III
SALT LAKE CITY, KOLKATA – 700 106

Memo No. 2413 -RD/O/NREGA/18S-03/09

Dated: 03.05.17

From: Sudipta Porel, WBCS(Exe)
Dy. Secretary to Govt. of West Bengal

To: The District Magistrate, Uttar Dinajpur

Sub: Estimate for construction of AWC building under MGNREGA in convergence with different Departments
Ref : His Memo.No. 2519/MGNREGS Dated 15.03.17

Sir,

With reference to the captioned Memorandum, it is to state that State Government has decided to introduce a model estimate for AWC building of covered area 676 square feet having estimated cost of Rs.7 lakh for the sake of structural uniformity in convergence models of AWC with different departments.

It has been also resolved to utilize the fund of converging department within the estimated value and fund gap between proposed estimate and departmental commitment will be bridged from MGNREGA with maximum ceiling of Rs.5 lakh.

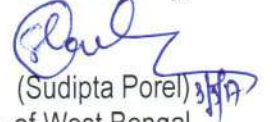
This order is binding for all type of convergence initiative in constructing AWC in convergence in the state.

The estimate with drawing is enclosed herewith for your ready reference.

With regards,

Encl : As stated.

Yours faithfully,


(Sudipta Porel)

Dy. Secretary to Govt. of West Bengal

Memo No. 2413 /1(30)/RD/O/NREGA/18S-03/09

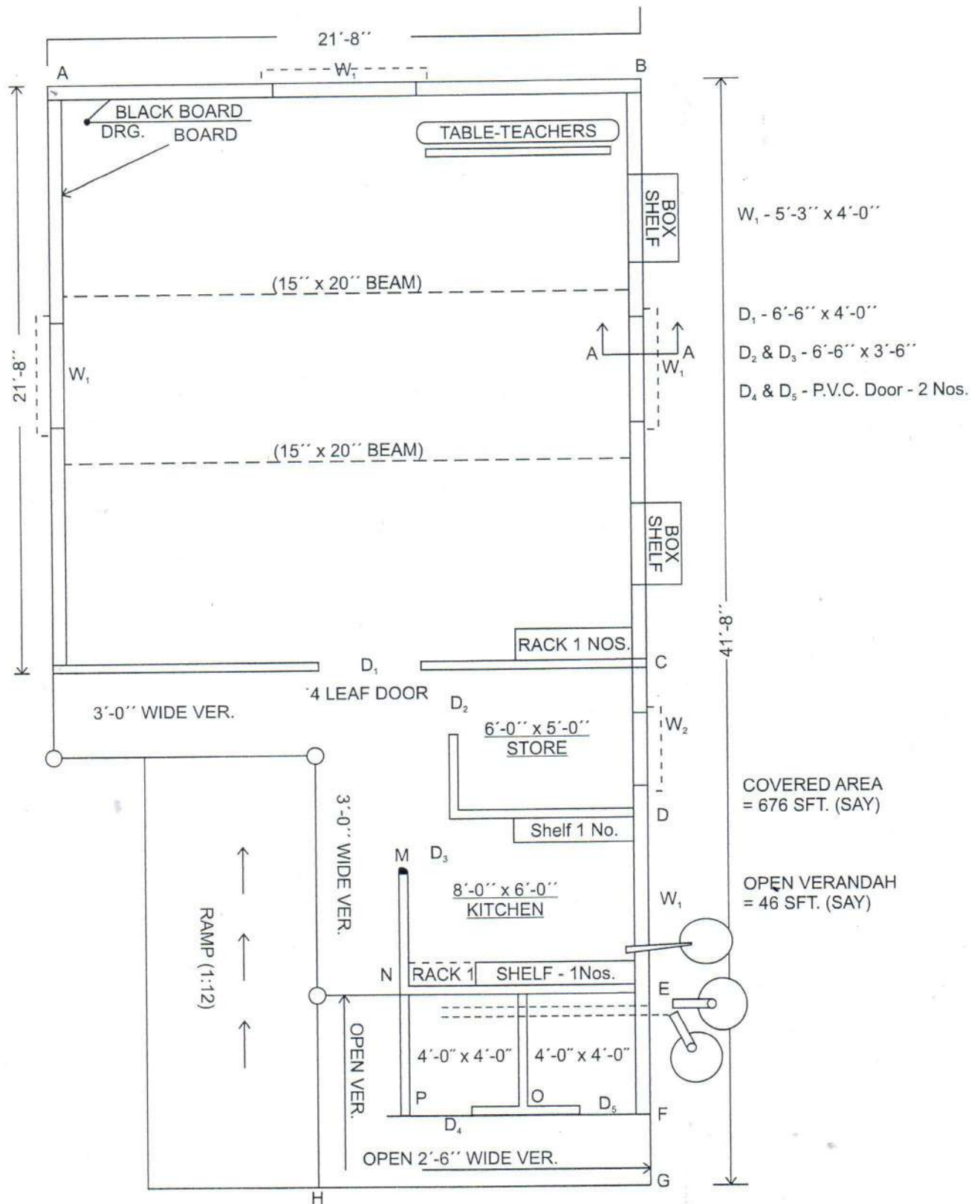
Dated: 03.05.17

Copy forwarded for information and necessary action to

- 1) The Principal Secretary, GTA
- 2-23) The District Magistrate, all except Uttar Dinajpur
- 24) The AEO, Siliguri Mahakuma Parishad
- 25) The Joint Secretary, Child Development Department
- 26-30) The Dy. Secretary, NBD/SA/BCW/TD/MA/PU Department


Dy. Secretary to Government of West Bengal

TYPICAL PLAN & ESTIMATE OF ANGANWARI CENTRE



20/4/17

Detailed estimate of Anganwadi Centre

1. Earth work in excavation in foundation

1/2 of wall 132'-2" x 3'-4" x 2'-6"	= 1100.23 cft.
3 No. Col. 3'-4" x 3'-4" x 2'-6"	= 83.17 cft.
Ver. 34'-2" x 2'-6" x 2'-6"	= 213.50 cft.
Ramp. 17'-0" x 6'-0" x 1'-0"	= 102.00 cft.
	<u>1498.90 cft.</u>
	= 42.45 m ³

2. Brick flat Soling to foundation :

132'-2" x 3'-4"	= 440.09 sft.
3 x 3'-4" x 3'-4"	= 33.37 sft.
34'-2" x 2'-6"	= 85.40 sft.
17'-0" x 6'-0"	= 102.00 sft.
floor 20'-0" x 20'-0"	= 400.00 sft.
Ver. 14'-10" x 3'-0"	= 44.49 sft.
19'-10" x 3'-0"	= 59.49 sft.
8'-10" x 2'-6"	= 22.08 sft.
Store 6'-0" x 5'-0"	= 30.00 sft.
Kit 8'-0" x 6'-0"	= 48.00 sft.
Toilet 2 x 4'-0" x 4'-0"	= 32.00 sft.
	<u>1296.82 sft.</u>
	= 120.52 m ²

3. 6" thick (1:3:6) Cement Concret with Jhama Khoa to :

(a) foundation

132'-2" x 3'-4"	= 440.09 sft.
3 x 3'-4" x 3'-4"	= 33.27 sft.
34'-2" x 2'-6"	= 85.40 sft.
17'-0" x 6'-0"	= 102.00 sft.
	<u>660.76 x 6" thick</u>
	= 330.35 cft.

(b) Floor :

20'-0" x 20'-0"	= 400.00 sft.
Ver. 14'-10" x 3'-0"	= 44.49 sft.
19'-10" x 3'-0"	= 59.49 sft.
8'-10" x 2'-6"	= 22.08 sft.
Store 6'-0" x 5'-0"	= 30.00 sft.
Kit. 8'-0" x 6'-0"	= 48.00 sft.
Toilet 2 x 4'-0" x 4'-0"	= 32.00 sft.
	<u>636.06 x 6" thick</u>
	= 209.90 cft.
	= 540.25 cft.
	= 15.30 m ³

4. 25 mm thick D.P.C. (1:1.5:3)

132'-2" x 10"	= 109.69 sft.
3 x 10" x 10"	= 2.06 sft.
1 x 34'-2" x 10"	= 28.35 sft.
	<u>140.10 sft.</u>
	= 13.02 m ²

5. Brick Work in foundation & plinth (1:6)

132'-0" x 35" x 3"	= 96.34 cft.
132'-0" x 30" x 3"	= 82.60 cft.
132'-0" x 25" x 3"	= 68.72 cft.

132'-0" x 20" x 3"	=	54.84 cft.	
132'-0" x 15" x 3"	=	41.30 cft.	
3 x 35" x 35" x 3"	=	6.38 cft.	
3 x 30" x 30" x 3"	=	4.69 cft.	
3 x 25" x 25" x 3"	=	3.24 cft.	
3 x 15" x 15" x 3"	=	1.17 cft.	
	=	359.28 cft.	= 10.18 m ³

Upto D.P.C. Rat-trap bond :

132'-2" x 2'-0"	=	264.32 sft.	
34'-2" x 2'-0"	=	68.33 sft.	
	=	332.65 sft.	= 30.90 m ²

D.P.C. to lintel level :

Rat trap bond :		= 1024.24 sft.	
132'-2" x 7'-9"			
Ded : D ₁ - 1 x 6'-6" x 4'-0"	=	26.00 sft.	
D ₂ , D ₃ - 2 x 6'-6" x 3'-6"	=	45.50 sft.	
W ₁ - 3 x 5'-3" x 4'-0"	=	63.00 sft.	
		(-) 134.5 sft.	
		889.74 sft.	= 82.68 m ²
			113.58 m ²

6. 3" R.C.C. Slab to Box Windows :

3 x 4'-6" x 1'-6" x 3"	=	5.06 cft.	
2 x 4'-6" x 1'-6" x 3"	=	3.38 cft.	
Box Shelf :			
(Top) 2 x 3'-0" x 1'-6" x 3"	=	2.25 cft.	
(Bottom) 2 x 3'-0" x 1'-6" x 3"	=	2.25 cft.	
(Shelf) 4 x 3'-0" x 1'-6" x 3"	=	4.50 cft.	
(Lintel) 3 x 4'-6" x 10" x 6"	=	5.60 cft.	
2 x 4'-6" x 10" x 6"	=	3.74 cft.	
(Chajja) 3 x 4'-6" x 1'-6" x 3"	=	5.06 cft.	
2 x 4'-6" x 1'-6" x 3"	=	3.38 cft.	
Kitchen Shelf / Rack :			
2 x 8'-0" x 1'-6" x 3"	=	6.00 cft.	
Room : 2 x 4'-0" x 1'-6" x 3"	=	3.00 cft.	
Lintel (Ver.) 44'-2" x 10" x 10"	=	30.42 cft.	
Chajja 44'-2" x 1'-6" x 3"	=	16.56 cft.	
	=	91.20 cft.	= 2.58 m ³

7. 250 mm thick Brick Work in
(1:6) mortar in Rat trap bond
from lintel to roof level

132'-2" x 3'-0"	=	396.30 sft.	
22'-8" x 3'-0"	=	67.98 sft.	
	=	464.28 sft.	= 43.15 m ²

8. 125 mm thick R.C. filler slab
to roof (1:1.5:3)

Roof : 676 sft. x 5"	=	283.92 cft.	
Beam : 2 x 21'-8" x 1'-3" x 1'-3"	=	67.68 cft.	
	=	351.60 cft.	= 9.96 m ³

Total area of the filler portion :

3 x 18'-8" x 5'-0"	=	270 sft.
9'-0" x 2'-0"	=	18 sft.



$$\begin{aligned}
 3'-0'' \times 3'-0'' &= 9 \text{ sft.} \\
 4'-0'' \times 1'-0'' &= 4 \text{ sft.} \\
 3'-0'' \times 4'-0'' &= 12 \text{ sft.} \\
 6'-0'' \times 4'-0'' &= 24 \text{ sft.} \\
 6'-0'' \times 2'-0'' &= 12 \text{ sft.} \\
 \hline
 &= 349 \text{ sft.}
 \end{aligned}$$

R.C. Concrete area = (676 - 349) sft. = 327 sft.
 Nos. of burnt clay roof tiles (Raniganj type)

of size - 14" x 9" x 1" i.e. $349 \div \left(\frac{14}{12} \times \frac{9}{12}\right) = 401 \text{ Nos.}$

For two layers - $401 \times 2 = 802 \text{ No.} \times 0.07 = 56 \text{ cft. (say)}$
 saving of concrete = 1.6 m³

9. 25 mm thick artificial stone floor (1:2:4)

floor 20'-0" x 20'-0"	=	400.00 sft.	
Ver. 14'-10" x 3'-0"	=	44.49 sft.	
19'-10" x 3'-0"	=	59.49 sft.	
8'-10" x 2'-6"	=	22.08 sft.	
Stove 6'-0" x 5'-0"	=	30.00 sft.	
Kitchen 8'-0" x 6'-0"	=	48.00 sft.	
Toilet 2 x 4'-0" x 4'-0"	=	32.00 sft.	
Dado / Skirting 132'-2" x 1'-3"	=	165.20 sft.	
44'-2" x 1'-3"	=	55.20 sft.	
Box 2 x 3'-0" x 1'-6"	=	9.00 sft.	
Shelf 4 x 3'-0" x 1'-6"	=	18.00 sft.	
Kitchen Shelf 2 x 8'-0" x 1'-6"	=	24.00 sft.	
Rack 2 x 4'-0" x 1'-6"	=	12.00 sft.	
Ramp 12'-0" x 6'-0"	=	72.00 sft.	
		<u>991.46 sft.</u>	= 92.14 m ²

10. Plaster (1:4) flush pointing to inner/outer surface

2 x 176'-4" x 10'-0"	=	3526.00 sft.	
Ded : Door 26.00 sft.			
Window 63.00 sft.			
Door 45.50 sft.	=	(-)134.50 sft.	
		<u>3391.50 sft.</u>	

Plastering of roof surface (intermediate area of filter assuming 20% area) of 636 sft.

127.20 sft.	
<u>3518.70 sft.</u>	= 327.02 m ²

11. Plaster to plinth

height with neat finish 176'-4" x 1'-6"	=	264.50 sft.	24.58 m ²
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WAGE COMPONENT

Sl. No.	Description	Qty.	USK	SSK	SK
1	Earth work in excavation in ordinary mixed soil lead 80'-0", lift 5'-0" @ 62 sft. / USK	1499 sft.	24		
2	Brick flat soling @ SSK-1, USK-4/34 m ²	120.52 m ²	14	3.5	
3	C. Conc. (1:3:6) @ SK-2, USK-3 / 2.1 m ³	15.3 m ³	22		14.5
4	25 mm thick D.P.C. (1:1.5:3) @ SK-2, USK-3 / 18 m ²	13.02 m ²	2		1.5

5	Brick work (1:6) @ SK-1, USK-2 / 1.4 m ³ 250 mm thick Rat trap bond (1:4) @ SK - 1.5, USK - 6.5 / 9.30 m ² [BK - 850, Cement - 3 Bags & Sand - 0.42 m ³]	10.18 m ³ 113.58 m ²	14.5 79		7 18
6	R.C.C. to Box Windows @ SK - 1, USK - 2 / 2 m ³	2.58 m ³	2.6		1.3
7	Brick work (1:4) (Rat trap)	43.15 m ²	30		7
8	R.C.C. filler slab (1:1.5:3) @ SK-2, USK-3 / 2 m ³	9.96 m ³	15		10
9	25 mm thick artificial stone floor (1:2:4) @ SK-5, USK-3 / 24 m ²	92.14 m ²	11.5		19
10	Flush pointing / Plaster to roof @ SK-2, USK-1 / 18 m ²	327.07 m ²	18		36
11	15 mm thick Plaster to Plinth with neat finish SK-2, USK-3 / 18 m ²	22.19 m ²	4		2.5
			236.6	3.5	116.8
			237 Nos. Say	4 Nos. Say	117 Nos. Say
				10 Say	
12	Supervisor 237/25			14 Nos.	

Wage Component : 237 Nos. x Rs. 176.00 = Rs. 41712.00

MATERIAL COMPONENT

Sl. No.	Description	BK (Nos.)	Jha (m ³)	Stone (m ³)	Sand (m ³)	Cement (m ³)	Steel	Tile	Shuttering (m ²)
1	Brick flat soling 120.52 m ²	3857							
2	C. Conc (1:3:6) 15.30 m ³		14.23		7.34	2.45			
3	25 mm thick D.P.C. - 13.02 m ² (1:1.5:3)			0.27	0.14	0.09			
4	Brick Work (1:6) - 10.18 m ³	3960			3.36	0.56			
	Rat trap (1:4:2) 113.58 m ²	10381			5.13	1.28			
5	R.C.C. (1:1.5:3) - 2.58 m ³			2.12	1.06	2.14	162 kg.		6.56 m ²
6	Rat trap (1:4) - 43.15 m ²	3944			1.95	0.49			
7	125 mm thick R.C.C. filler slab (1:1.5:3) 9.96 m ³ filler material 802 Nos. tiles 1.60 m ³ 8.36 m ³								
				6.86	3.43	0.88	525 kg.	802 Nos.	80 m ²
8	Artificial Stone / floor (1:2:4) - 92.14 m ²				1.20	0.30			
9	Flush painting / Plaster (1:4) - 327.07 m ²				0.41	0.10			
10	15 mm thick plaster to plinter (1:4) - 24.58 m ²								
		22142 = 22150 Nos.	14.23 = 14.5 m ³ (say)	9.25 m ³	24.02 = 24 m ³ say	8.29 m ³ = 236.85 = 237 Bags	687 kg.	802 Nos.	86.56 m ² = 87 m ² say

COST OF MATERIAL

1. Bricks 22150 Nos. @ Rs. 8000%	Rs. 1,77,200.00
2. Jhama Chips 14.50 m ³ @ Rs. 1170.00 / m ³	Rs. 16,965.00
3. Stone 9.25 m ³ @ Rs. 2000.00 / m ³	Rs. 18,500.00
4. Sand (Medium) 24 m ³ @ Rs. 550.00 / m ³	Rs. 13,200.00
5. Cement 237 Bags @ Rs. 378.00 / Bag	Rs. 89,586.00
6. Raniganj Tiles 802 Nos. @ Rs. 12.00 / Each	Rs. 9,624.00
7. Hire charges for shuttering 87 m ² @ Rs. 200.00 / m ²	Rs. 17,400.00
	<u>Rs. 3,42,475.00</u>

	M.S. clamp for fixing D/W frames in wall with C.C. (4:2:1) (40mm X 6mm X 250 length)	60	Nos.	51.00	3060.00
	Panel shutters of door and window, as per design (each panel consisting of single plank without joint), including fitting and fixing the same in position but excluding the cost of hinge and other fittings. 25mm. Thick shutters with 12mm. Thick panel. (other local wood)	11.005	Sq.Mt	1274.00	14020.37
3	Supplying fitting, fixing of door & window fitting a) Iron butt hing (10cm X 50mm X 1.25mm)	54	Nos.	41.12	2220.48
	b) Iron socket bolt (10cm X 10 cm)	34	Nos.	39.17	1331.78
	c) Hasp bolt (250 cm long)	4	Nos.	173.29	693.16
	d) Anodised Al. Dtype handle (100 X 10mm)	8	Nos.	72.2	577.60
	e) Window ring (7.5 cm) P-209it-59 (ii)	20	Nos.	30.28	605.60
11	M.S. ornamental grill of approved design for windows including fitting fixing complete. Above 16 kg/59	257.6	Kg.	65.26	16810.98
12	White washing 3 coats to inside the building	223.13	Sq.Mt	13.44	2998.87
13	Decorative cement based paint to out side the building after preparing the surface (two coats)	170.5	Sq.Mt	42.64	7270.12
14	Priming one coat on timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	72	Sq.Mt	30.43	2190.96
15	Priming one coat on steel or other metal surface synthetic oil bound primer of approved quality including smoothening surfaces by sand papering	30	Sq.Mt	24.87	746.10
16	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary. On timber or plastered surface: With other than hi-gloss of approved quality. Two coats (with any shade except)	13	Sq.Mt	61.96	805.48
17	Paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary. On steel or other metal surface: with other than hi-gloss of approved quality. Two coats (with any shade except white)	17	Sq.Mt	58.03	986.51
18	Supplying, fitting & fixing UPVC pipes A-Type and fittings conforming to IS:13592-1992 with all necessary clamps nails. including making holes in walls, floor etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including joining with jointing materials (Spun Yarn, Valamoid/ Bitumen/M-Seal etc) complete. 75mm. dia.	6	Mt.	162.00	972.00
19	Supply & fitting, Fixing of PVC doors to toilet and Urinal (Including PVC frame)	2	Nos.	3000.00	6000.00
20	Supply & fitting, Fixing of S.W Soil pipe. (Including all fittings)	5	Nos.	224.00	1120.00
21	Supplying, fitting and fixing cast iron "P" trap	1	Nos.	943.00	943.00
22	Water closet Indian Pattern	1	Nos.	712.00	712.00
23	Supplying, fitting and fixing cast iron pit cover	3	Nos.	1000.00	3000.00
24	Brick Khosa for soak well	1.5	Cu. Mt	900.00	1350.00
25	Nail, Plastic sheet, etc.	L.S		1500.00	1500.00
26	Supplying, fitting and fixing smoke less Chullah	1	Nos.	3000.00	3000.00
27	Display Board	1	Nos.	1000.00	1000.00
28	Skilled Labour cost	117	Nos.	352.00	41184.00
29	Semi-Skilled cost	4	Nos.	264.00	1056.00
					4,58,630.01
Wage Cost					
		237.00	Nos.	176.00	41712.00
1	Un-Skilled wage				500342.00

Provision for Water supply Electrification Vegetative Fencing

1	Water Supply (10% of Total Material Cost) of 458630.00	L.S.	68795.00
2	Electrification (15% of Total Material Cost) of 458630.00	L.S.	68795.00
3	vegetative fencing, child friendly oil painting & amenities including furnitures etc.	L.S.	62000.00
Grand Total			6,99,932.00
Say Rs.			7,00,000.00

Note: Wage rate to be modified as per new/latest notification