



DESIGN PACKAGE

Using Alternate Building Materials & Technologies



Design Concept for Rural Housing in Central India for IAY and Other Similar Scheme

(based on pilot study of a Village in Uttar Pradesh Region)



BUILDING MATERIALS & TECHNOLOGY PROMOTION COUNCIL

Ministry of Housing & Urban Poverty Alleviation Government of India

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PREFACE

Ministry of Rural Development, Government of India has estimated shortage of houses to the tune of 47.3 million in rural areas during 2007-12. Out of which 90% are for BPL families, which leaves a challenging task to provide shelter to all in most economical way.

Varying geo-climatic conditions, hazard scenario, availability / non-availability of different building materials in the region, living habits of people in different parts of the country influence the typology of buildings in rural areas. Any planning / design of dwelling units, therefore, need study of local typology, materials availability and living pattern of the people.

Government is operating Indira Awas Yojana, as sub-scheme of Rural Landless Employment Guarantee Programme, primarily to help upgradation / construction of dwelling units for members of SC/ST, freed bonded labours and others falling below the poverty line non SC/ST rural households by providing them a lump-sum financial assistance. The present ceiling of financial assistance for each dwelling unit is Rs. 70000/- in plain area and Rs. 75000/- in hilly difficult areas.

The Guidelines of IAY keeps it open ended with no type design proposed. With minimum of 20 sqm. plinth area; layout, size and type design are left to the preference of the beneficiary. Obviously it is desirable to study the housing type, material availability and functional need of the people of a particular region before any plan is made. Left to fend themselves with meagre income, rural population has innovated several options to facilitate shelter for themselves.

A Pilot study was taken in the village Thaura Mehadevan in Amethi Tehsil of U.P to know the present status of housing in the region and to explore the possibility of providing basic shelter need within the existing financial means.

The study revealed that the traditional pattern mainly consists of courtyard in the centre with rooms surrounding it. Walling is generally of mud construction with roofing made of country tiles, supported on traditional wooden trusses. A narrow verandah having a thatched lean to roof is also very commonly used. The study concentrates on typology approach to both house design and specifications for key components of walling and roofing. However, upgradation of existing houses for structural safety, fire and disaster resistance and durability may be essential. The study does not cover this aspect.

The present design concept is based on traditional typology that exists in the region. Incremental growth concept and self help construction utilizing locally available materials have also been given due weightage here. The proposed design further is on the basis of central courtyard and incorporates four stages of extension. First phase covers unit of atleast 20 sqm. plinth area including a WC and bathing space. Depending upon the specifications decided, it maybe possible to construct one house within Rs.1,00,000/-.

To assess the implication on cost of various materials option for walling and roofing, a cost matrix has been developed, indicating the plinth area rate of construction that can be achieved assuming no involvement of self-help labour. If beneficiary, construct the house themselves cost would reduce further. The cost matrix will serve as tool for comparative analysis and decision making for assessing impact of various options available.

In rural areas, construction systems need innovative approach. No profit no loss basis institutions like Building Centres need to be activated to guide beneficiaries through various process of reconstruction, including beneficiary participation.

BMTPC places deep appreciation for the valuable contribution of Prof. M.N.Joglekar, his team and Center of Science for Villages, Wardha in collecting necessary information from villages and working out detailed guidelines with BMTPC. Also efforts of Shri J.K.Prasad, Chief (BM) and Shri Dalip Kumar, SFO (DC&E), for bringing the document to comprehensible shape are acknowledged.

Dr.Shailesh Kr.Agrawal
Executive Director, BMTPC

VILLAGE THAURA MAHADEVAN, AMETHI TEHSIL

The Study is undertaken for the village THAURA MAHADEVAN located at a distance of 4 Km. from town of AMETHI, and is almost a rural satellite, dependent on the city of Amethi. It is a small hamlet of 28 houses with about 180 persons and is a part of

AMETHI AND VILLAGE THAURA MAHADEVAN

In Lucknow on 7 October 2003, the State Cabinet revoked the earlier notification regarding renaming of AMETHI as CHHATRAPATI SHAHU JI MAHARAJ NAGAR. As of 2001 India census ^[2], Amethi had a population of 12,808. Males constitute 52% of the population and females 48%. **AMETHI** is a town and a nagar panchayat in Sultanpur district in the state of Uttar Pradesh, India. Amethi lies in latitude 26 degree 9 minute north and longitude 81 degree 49 minutes east on Raibareli-Amethi-Sultanpur road about 40 km south-west of SULTANPUR, district HQ. Also called as Raipur-Amethi of which Raipur belonged to the Raja of Amethi who lived at Ram Nagar.

VILLAGE THAURA MAHADEVAN

Study village Thaura Mahadevan is situated around 3-4 kms from Amethi on the Amethi – Sultanpur road. This is a small hamlet of 28 households and can also be seen as an extension to the neighboring village. The rationale behind taking this village for study was of its' vernacular character. The major proportion of shelters had the traditional character that exists in villages. Although being on the road side THAURA MAHADEVAN did not have the urban impact on the characteristics of the shelter in the context of urban functional spaces and usage of material and the construction details. Use of locally available material was more visible in the construction of houses. Although being only 3 – 4 kms from

the center place in AMETHI, the impact of new construction techniques was not visible to a great extent.

Table 01: POPULATION CHARESTERESTICS

NUMBER OF MEMBERS IN A FAMILY

Up to o3	Up to o4	Up to 5	Up to 06	More than 06
03 (10.73%)	01 (03.57%)	02 (07.14%)	04 (14.29%)	18 (64.79%)

NUMBER OF MALE MEMBERS IN A FAMILY

01 Male	02 males	03 males	04 males	More than 04
08 (28.57%)	09 (32.14%)	02 (07.14%)	06 (21.43%)	03 (10.71%)

NUMBER OF FEMALE MEMBERS IN A FAMILY

01 Female	02 Females	03 Females	04 Females	More than 04
07 (25%)	07 (25%)	06 (21.43%)	05 (17.86%)	03 (10.71%)

EDUCATION LEVEL OF FAMILY HEAD (MALE)

Primary	Highschool	Intermediate	Graduate	Postgraduate	other
18 (64.29%)	02(07.14%)	05 (17.86%)	03(10.71%)	00(00%)	00(00%)

EDUCATION LEVEL OF FAMILY HEAD (FEMALE)

Primary	Highschool	Intermediate	Graduate	Postgraduate	other
17(47.77%)	00(0%)	00(0%)	00(0%)	00(0%)	11(52.23%)

Village has predominance of large families with almost 65% families have more than six persons. This reflects on size of house. Majority families 2/3 male members 1/3 female members. Most family heads (male) do not have education level beyond primary school, while more than 50% females are uneducated.

Table 02: VILLAGE OCCUPATION PATTERN

OCCUPATION OF THE FAMILY HEAD

farming	Service	Business	Dairy	Others
27(75%)	04(11.11)	01(2.78%)	00(0%)	04(11.11%)

AGRICULTURE PRODUCE

Traditional	Commercial
36(100%)	00(0%)

MONTHLY INCOME OF THE HOUSEHOLD (Rs)

Up to 2000	2001 to 5000	5001 to 10000	Above 10000
22(78.57%)	03 (10.71%)	02 (07.14%)	01 (3.57%)

HOUSEHOLD POSSESSIONS

TV	Desert Cooler	Two Wheeler	Four Wheeler	Tractor	Commercial Veh.
03 (10.71%)	00(0%)	04(14.29%)	00(0%)	01	00(0%)

LIVE STOCK OWNERSHIP

Buffaloes	Cow	Sheep/Goat	Dog	Horse	Cock/Hen	others
21	21	05	00	00	00	00

The other aspect was the size of the village. The village was not very large and only had 28 households which was ideal for such a study, secondly the village was located on the main road which was connecting Amethi and Sultanpur. Also with few exceptions, the economical status of the households was seen to be similar in nature. Most of the families were involved in agricultural occupation. Of the 28 families surveyed, 75% had farming as their occupation only 11% had been surviving on service as occupation. Among the families that solely depend upon service as their occupation, it seems that the agricultural land that is owned by them has not been enough to sustain that family and some of the members have taken to jobs such as labourers in the town of AMETHI. This could be understood when the education level of the villages is investigated, as only 10% of the family heads were graduates and most of the family heads had their education till primary level. Only 47% of the female heads of the families were literate and had an education up to primary level.

All the families that were dependent on agriculture were practicing traditional farming, and no cash crop was being cultivated by them. The education level and awareness towards know how of the types of cash crops could have been the reason behind such a practice. As a result of which -

the household income of the families had not been as good as to sustain the family in a very decent manner. Nearly 80% of the families on an average had a monthly income of Rs. 2000/-. Only 10% of the households had an income which was Rs. 10,000/- and above. The household income thus reflects the amenities that these families enjoyed. Only 25% of households had entertainment mediums such as T.V. and their own transport. Three of the 28 households had T.V sets in their houses and only 4 households owned two wheelers. Only one household owned a tractor which was utilized for agricultural purposed and was also used for commercial uses such as rented out for loading and unloading and also in agriculture. The livestock ownership was limited to buffaloes, ox, cow and sheeps/goats. Majority of houses owned buffalos/cows. Twenty one of the 28 households owned either of these livestock. These live stocks were mainly used for commercial purpose and the milk was sold to the population in the town.

Table 03 : HOUSING & INFRASTRUCTURE HOUSING SATISFACTION

Yes : 14 (50%) No : 14 (50%)

NEED FOR ADDITIONAL SPACE

Yes : 24 (85.71%) No : 04 (14.29%)

EXTENSION OF HOUSE FOR ADDITIONAL SPACE

Possible : 26 (97.86%) Not possible : 02 (07.14%)

TYPE OF STRUCTURE

Permanent / Pukka : 02 (7.14%) Temporary/Kaccha : 17 (60.71%) Mixed : 01 : (03.57%)

ROOFING (HOUSE)

RBC/RCC : 00 (0%) Tin Shed : 02(07.14%) Thatched: 16 (57.14%) Mixed : 11(39.29%)

ROOFING (ANIMAL SHEDS)

RBC/RCC 00 (0%) Tin Shed : 02(07.14%) Thatched: 24 (85.71%) Mixed : 01(03.57%)

ROOFING (STORE)

RBC/RCC 00 (0%) Tin Shed : 00(00 %) Thatched: 23 (82.14%) Mixed : 01(03.57%)

WALLING MATERIALS (HOUSE)

Brick/cement: 08 (28.57%) Brick/mud : 05 (17.86%) Mud : 13(46.43%) Others :02(7.14%)

WALLING MATERIALS (ANIMAL SHED)

Brick/cement: 01 (3.7%) Brick/mud : 05 (17.86%) Mud : 00(00%) Others :21(75%)

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WALLING MATERIALS (SEPARATE STORE)

Brick/cement: 00 (00%) Brick/mud : 05 (17.86%) Mud : 20(71.43%) Others :00(00%)

WATER SUPPLY

Hand pump : 14 (50%) Well : 12 (42.86%) others : 02(7.14%)

WATER SUPPLY SOURCE

Family owned : 21 (75%) Community well/hand pump : 06 (21.43) Others : 00 (00%)

COMMUNITY WELL / HAND PUMP – DISTANCE FROM HOUSE

10 mts : 18 (64.29%) 20 mts : 05 (17.86%) More : 05 (17.85 %)

TOILET AVAILABILITY

Yes : 21 (75%) No : 07 (25%)

TOILET TYPE : Leach pit : 21 (75%) Septic Tank : 00 (00%) Others ; 00 (00%)

ELECTRIC SUPPLY : yes: 05 (17.86%) No : 23 (82.14%)

ELECTRICITY POINTS light : 05 (17.86%) Fans ; 05 (17.86%)

APPROACH ROADS :

Mettalled road : 00(0%) Kuccha road: 17 (60.71%) Kaharanja road : 11 (39.29 %)

TOILET PLACEMENT ; attatched : 00(00%) Detached : 21(75%) No toilet: 07(25%)

DETACHED TOILET DISTANCE:5 mts: 02(9.52%) 10mts: 08(38.1%) More:11(52.38%)

BIOGAS & SOLAR ENERGY : None SOLID WASTE DISPOSAL SYSTEM : none

USE OF COWDUNG : Cooking Fuel;14(50%) Organic Fuel: 14 (50%)

COOKING MODE : Cow dung cake and wood : 28 (100%)

A first glance at the site plan of the village suggests an unorganized pattern of growth of the settlement. This could be due the land ownership pattern of the village. Most of the settlements were not a single structure settlements, but were in the form of a cluster of structure with each structure within that cluster had an allocated functional activity. Only 7% of the structures in the village were totally Pakka/permanent in nature where as others were either kaccha or were mixed in nature. Mixed structure which had part of the structure pakka (say two rooms that were used as bedrooms/sleeping rooms/storage) and rest of the activity spaces either mud structure or just sheds with thatch roofs etc. Around 32% of the houses had such character in terms of construction techniques. **Sixty percent** of the houses were kaccha and were more traditional in -

nature in terms of the planning of functional spaces, use of construction materials and the construction details. Such houses have been thoroughly documented for the purpose of this research along with houses that had a mixed character.

The construction of various structures within a given cluster depended upon the type of activity taking place in that structure. Visually there was a clear hierarchy seen among the various structures in a given cluster and to a certain extent their functional utilization was also visible. A general tendency of a common open space within the cluster was witnessed. The open area was primarily used as multifunctional space. When asked about the requirements for shelter where they would feel comfortable, 50% of the households felt that they need more space for a comfortable living. A further exploration about these families revealed that these were joint/extended families and the present structure was not able to satisfy their present needs. As a result of which certain activity like cooking, grain storage, etc. was not possible inside the covered structure. Such activities were done in the semi-covered and open spaces which in turn became uncomfortable during harsher climatic conditions. 85% of families in some way or the other felt that additional space was required and as a result extension for the house was needed. If we look at the roofing system we could see 8% of the shelters had either reinforced cement concrete or reinforced brick concrete roofing on the entire construction. More than 50% of the houses had thatched roofing system completely, whereas 40% had a mixed roofing system where part of house was having RBC roofing and part had thatched roofing system.

The animal sheds that were part of the cluster predominantly had thatched roofs. Around 85% of these areas had thatched roofs whereas rest had tin sheds. Only 25 of the 28 dwelling units had animal sheds separately. Storage area where farming equipments, and other necessary items were kept was part of the cluster. Of the 28 dwelling units 24 of the clusters had separate storage space. These spaces were in the form of open sheds which predominantly had thatched roofing. If we explore the walling material of the dwelling units, mud walls were seen as the most commonly used walling material. Around 50% of the dwelling units had mud walls, as compared to 18 % where brick was used with mud mortar, and 29% where cement was used as mortar. Walling material for animal sheds, and other storage areas was mud.

Hand pumps and wells were that major sources for drinking water in the village. These sources were equally divided within the village. 50% of the families used wells as water sources and the rest used hand pumps. These hand pumps and wells were provided by the government and were also privately owned. Of the wells and hand pumps, 75% were privately owned where as only 25% were owned by the community. In case of community owned hand pumps and wells, these were located at a comfortable distance from the dwelling units. Majority of the water sources were located at around 10 m. from the dwelling units. Also it was witnessed that the privately owned hand pumps and wells were also being used by nearest neighbors and acted as a community facility.

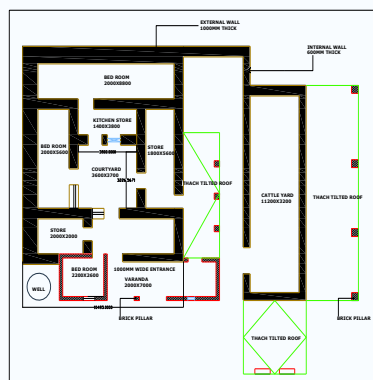
Under the government scheme, community toilets were constructed by the state government. Over 75% of the households were using toilets only 25% were going out in open. When observed toilets were newly made and were in the working conditions. The disposal of the soil waste was to the leech pits. All the toilets were detached from the main house. This is very common in village in this region. Most of the villagers had to walk more than 10 mts for the toilet. Only 17% of the dwelling units had electrical connection and there was no street lighting system in the village. Although the waste generated by the villagers was very less, it was disposed as per the convenience of the householders and was thrown at the nearest vacant land/area. Cow dung cakes were the main cooking mode for the villages. Fire wood was also used to cook food but not to that extent as compared to cow dung cakes.

HOUSING TYPOLOGY

Traditional Housing pattern mainly consists of courtyard in the center and rooms surrounding it. External walls are of mud almost one mt. thick with internal walls of 0.6mt. thickness. Roof

is of country tiles, supported on traditional wooden trusses. Windows on external wall are almost absent. Whatever openings the rooms may have, are opening on to internal court yard. Room widths are normally narrow, mostly less than 3mts in width and ablong in shape. House is normally entered through a narrow verandah having a thatched lean to roof. Most of the houses have a cow shed with either tin or thatched roof. Most of the houses are large with built up area over 100 sq. mts excluding cow shed.

(01)* HOUSE OF MATHAPHER YADAV



Built up area : 126.86 Sq. mts

Internal Court yard : 13.68 Sq. mts

Covered verandah : 16 Sq. mts

Cattle yard : 89.6 Sq. mts

A well & a thatched roof platform for

House Contents

Room 01 : 2x8.8m

Room 02 : 2x5.6m

Room 03 : 2x5.3m

Room 04: 2.2x2.6m (New addition)

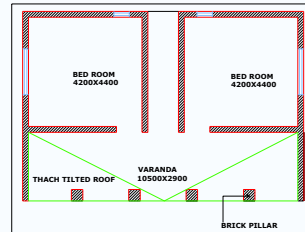
Kitchen : 1.4x2.8m

Verandah : 2x7m

Store 01 : 1.8x5.6m

Store 02 : 2x2m

(04)* HOUSE OF RAM LAKHAN



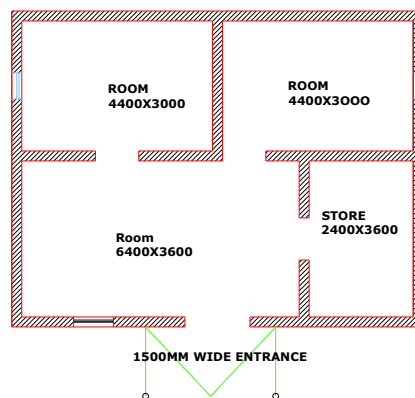
Built up area : 52.6 Sq.mt

Room 01 & room 02 : 4.2 x 4.4m

Verandah : 31.5 Sq.mts (10.5x3)

New construction in brick load bearing

(18)* HOUSE OF RAM MANORATH



Built Area: 69.35 Sq.mts

Room 01 & 02 : 4.4x3m

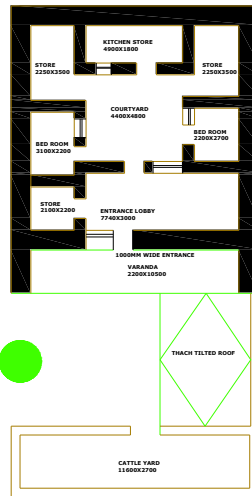
Room 03 : 3.64x3m

Entrance Verandah : 05 Sq.mt (1.5 x 3.3m)

Store: 3x2.4m New construction with Brick walls

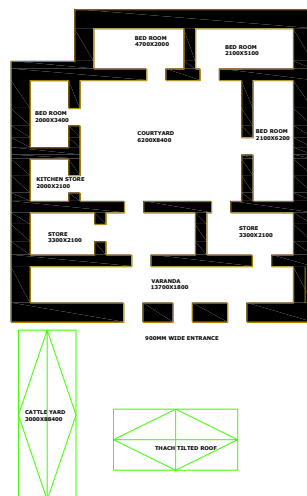
Verandah with sloping thatched roof. R C C slab for house.

HOUSE OF RAM KUMAR



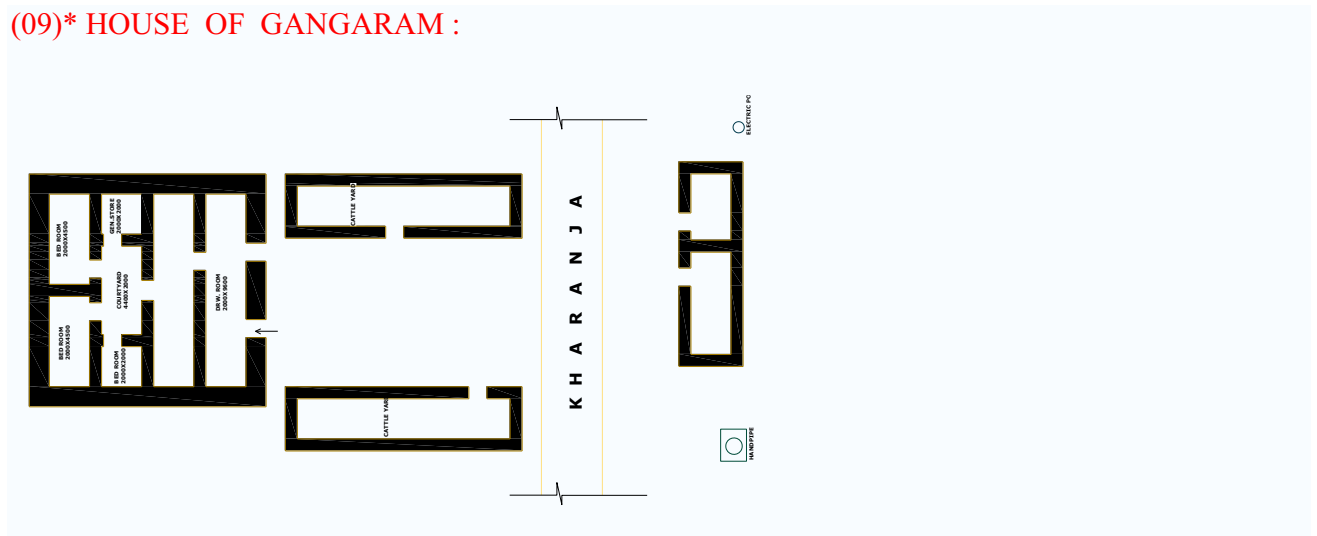
Built up area : 133.434 Sq.mts Rooms 01 & 02 ; 3.1x 2.2m Room 03 : 2.2x2.7m Stores 01:02.25x3.5m
 Court yard :21.56Sq.mts.(4.4x4.8m) Verandah: 27.6Sq.mts(2.2x10.5) Entrance Lobby; 7.7x3m
 Cattle Shed:45sq.mts Thatched Shed : 31Sq.mts Mud Walls, Country tile roof Thatched for sheds

(10)* HOUSE OF OMPRAKASH



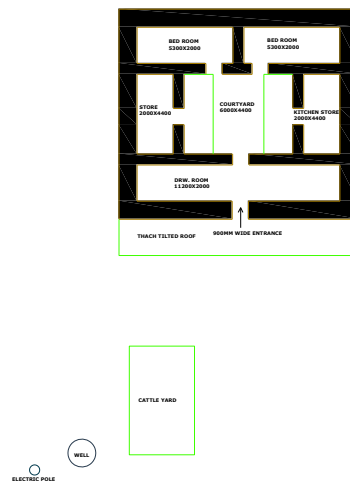
Built up area: 150 Sq.mts Room 01:2x4.3m Room 02: 2.1x5.1 Room 03 :2x3.4m
 Court Yard: 53Sq.mts (6.3x8.4) Room 04:2.1x6.2m Room 05:2.1x2.2m Store 01/02: 3.3x2.1m
 Cattle Shed: 25.8sq.mts (8.6x3m) Thatched shed : 20.7Sq.mts(6.47x3.2m)
 Roof ; country tiles on wooden trusses, thatched shed

(09)* HOUSE OF GANGARAM :



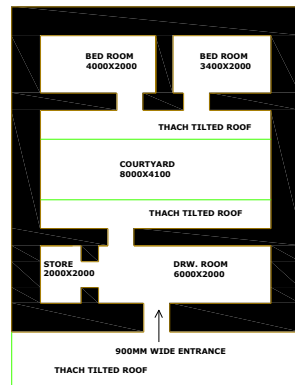
Built up area: 128 Sq.mts Room 01 & 02: 2.2x4.5m Room 03: 2x2m Room 4&5: 2x9.6m
 Verandah (4.4x2m) 8.8Sq.mts Store: 2x2m Cattle shed 01&02: 11.8x3.2m Hand pump, Elect. Pole

(23)* HOUSE OF RAMPHER



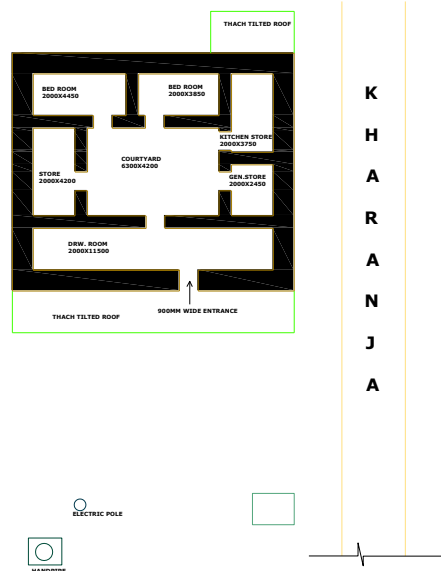
Built Up Area : 137 Sq.mts Room 01&02: 5.3x2m, Room 03: 11.2x2m Store : 02x 4.4m
 Court Yard : (4.4x6m) 26.4Sq.mts Kitchen : 2x4.4m Verandah: 2x13.2m Cattle Yard : 06x3.6m
 Well, Elect pole, 01m & 0.6m load bearing mud wall, tiled and thatched roof on wooden truss

(36)* HOUSE OF RAM KRIPAL :



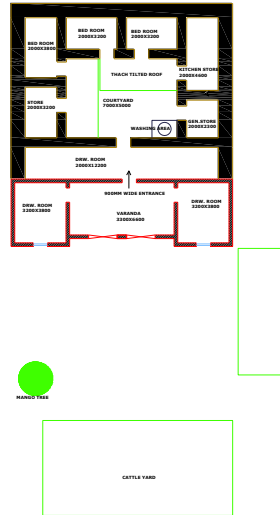
Built Up Area : 80 Sq.mts Room 01: 4x2m Room 02 : 3.4x2m Room 03 : 6x2m Store: 2x2m
 Court Yard : (8x4.1m)32.8Sq.mts Verandah : 0.9x10m 01&0.6m load bearing mud wall. Country
 Tile roof over wooden truss, Thatched roof over entrance

(33)* HOUSE OF RAM KABODH



Built up area : 128 Sq.mts Room 01: 2x4.5m Room 02: 2x3.85m Room 03: 2x11.5m Store
 1:2x4.2m Court Yard: (6.3x4.5m)26.5sq.mts, Store 02: 2x2.45m, Kitchen : 2x3.75m Ent. Verandah:
 13.5x0.9m 01m thick & 0.6m load bearing mud walls, Country Tile roof over main house,
 thatched roof over chara machine shed (2x1.5m),over entrance verandah & shed at rear of House.
 Hand pump & elect.pole

(29)* HOUSE OF HAUSALA PRASAD



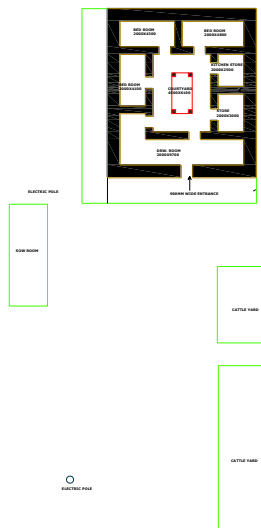
Built up area:120Sq.mts, Court Yard:(7x5m)35Sq.mts,

Room1&2:2x3.2m,Room03:2x11.5,room04:2x12

New addition: 60Sq.mts,Room5&6:3.2x3.8m,Verandah:3.3x6, Cattle Shed:6x12m, elect pole, 01&0.6m loadbearing mud walls for old house, New addition in Bk.wall; Tiled roof over old house, Flat RCC roof over new addition.

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(35)* HOUSE OF RAM SUKH



Built up area: 128Sq.mts, Room 01,02 &03: 02x2.5m, Room 04: 02x9.7m, Kitchen:02x2.5m,

Store:2x3m, Court Yard: 27.4Sq.mts(04.5x6.1m) entrance verandah:11.7x0.9m, Sow room:3x8m,

Cattle Yard 1:4x6m Cattle Yard 02: 13x4m, 01&0.6m load bearing mud wall, tiled roof over main

house, thatched roof over verandah & cattle sheds, Electric pole, Hand pump

COMMON FEATURES OF HOUSING TYPOLOGY :

- (01) : Large houses with over 100 Sq. mts built area.
- (02) : New houses are smaller with built up area varying between 50 to 70 Sq.mts.
- (03) : All houses are single storied
- (04) : Old Houses have internal court Yard
- (05) : New additions do not have internal Court Yard pattern
- (06) : Old construction has load bearing mud walls of 01 mt. thick
- (07) : New construction is of 23cm thick load bearing brick wall
- (08) : Old houses have local country tile roof supported over wooden trusses
- (09) : New houses have flat R C C or R B C roof
- (10) : Due to mud wall construction old houses have room span not exceeding 02mts.
- (11) : New houses have room span over 03mts.
- (12) : Old houses do not have proper windows and suffer from adequate light and ventilation
- (13) : New additions as well as new houses have proper windows
- (14) : Old houses have cattle sheds attached
- (15) : Pit latrines are not attached to houses, but are separately located nearby.

VILLAGE DEVELOPMENT PLAN (Refer Fig. 01)

Village THAURA MAHADEVAN typically reflects the state of villages in INDIA. Primary Concern has always been with the Village economy. Limitation of this study has been that it is undertaken at a level below village. This settlement is a hamlet or cluster of village houses and is a part of village PANCHAYAT that consists of many more such clusters. Centered around the AMETHI town, conglomeration of these rural clusters need a regional approach to consolidate the benefits of rural development – both physical and economic. This is particularly relevant, given that the household incomes as low as Rs. 2000/- per month. Development priority therefore has to be to provide physical space to generate more income generation opportunity.

Primary constraint in pursuing any Development Proposal in rural set up has been the grossly inadequate land records and land grabbing. Land ownership boundaries are difficult to establish. Apparent underutilization of land gives an impression of substantial vacant land that is neither utilized by the apparent owners nor available as consolidated parcels of land. Consequently first priority goes to provision of health, sanitation and community facilities followed home up gradation. Demand for new housing rarely exists unless the the village growth is spurred up through generation of economic activities.

This hamlet is located directly on the AMETHI – SULTANPUR road, and has a lot of land fronting the main road, that can be used more effectively. However land ownership disputes need to evolve an appropriate implementation system. What is more important is to identify the land development proposals in the context of AMETHI city region.

The land along the road side (State Highway) has been identified for five proposals that can help generate employment. These are :

- 1) Rural Hospitality Center
- 2) Rural Service Center
- 3) Rural Building Services center
- 4) Rural Crafts production, Display and sales outlet.
- 5) Commercial Plantation

These proposals can be implemented by the Owners of the land themselves, singly or jointly either with private or Govt. participation. This should negate the land acquisition requirement. Land could be equity contribution by the owners. Broad description of these projects is as follows:

1) RURAL HOSPITALITY CENTER. Area:

4) RURAL CRAFTS , PRODUCTION AND DISPLAY CENTER. Area :

Around Urban Centers there is a considerable demand for experiencing the nuances of rural life, food and culture. Establishments of this type are evident and are flourishing around major urban settlements. VISHALA in AHMEDBAD, Gujarat, CHOKHI DHANI in JAIPUR etc. are examples. These are often combined with rural art and craft production and display. These are major tourism attractions and are in great demand. Such establishments will generate direct and indirect employment through multiplier effect. These centers will only use local manpower as well as local skills. Benefits will go directly to local rural population only.

2) RURAL SERVICE CENTER : Area :

Will be a “Facility Center” that caters to the basic needs of rural population. This consists of a cluster of 10 to 15 shops / workshop, according to local needs.

Shops/workshops/ for mechanical repairs of agricultural equipment, bicycles, tractors, Vehicle repairs (Jeeps, cars, motorcycles etc.) Electrical equipment repairs such as Pumps, Sale of seeds, manure etc. Grocery shops as well as marketing of agricultural products can be effected through such centers.

3) RURAL BUILDING CENTER : Area :

This is intended to promote the local construction skills, materials and technologies for building construction. Trades that can be promoted and products marketed relate to Carpentry and clay based products in various forms as used traditionally. Proposal is similar to Building Centers earlier promoted by Govt. India. However additional component visualized is of training as well as skill upgradation.

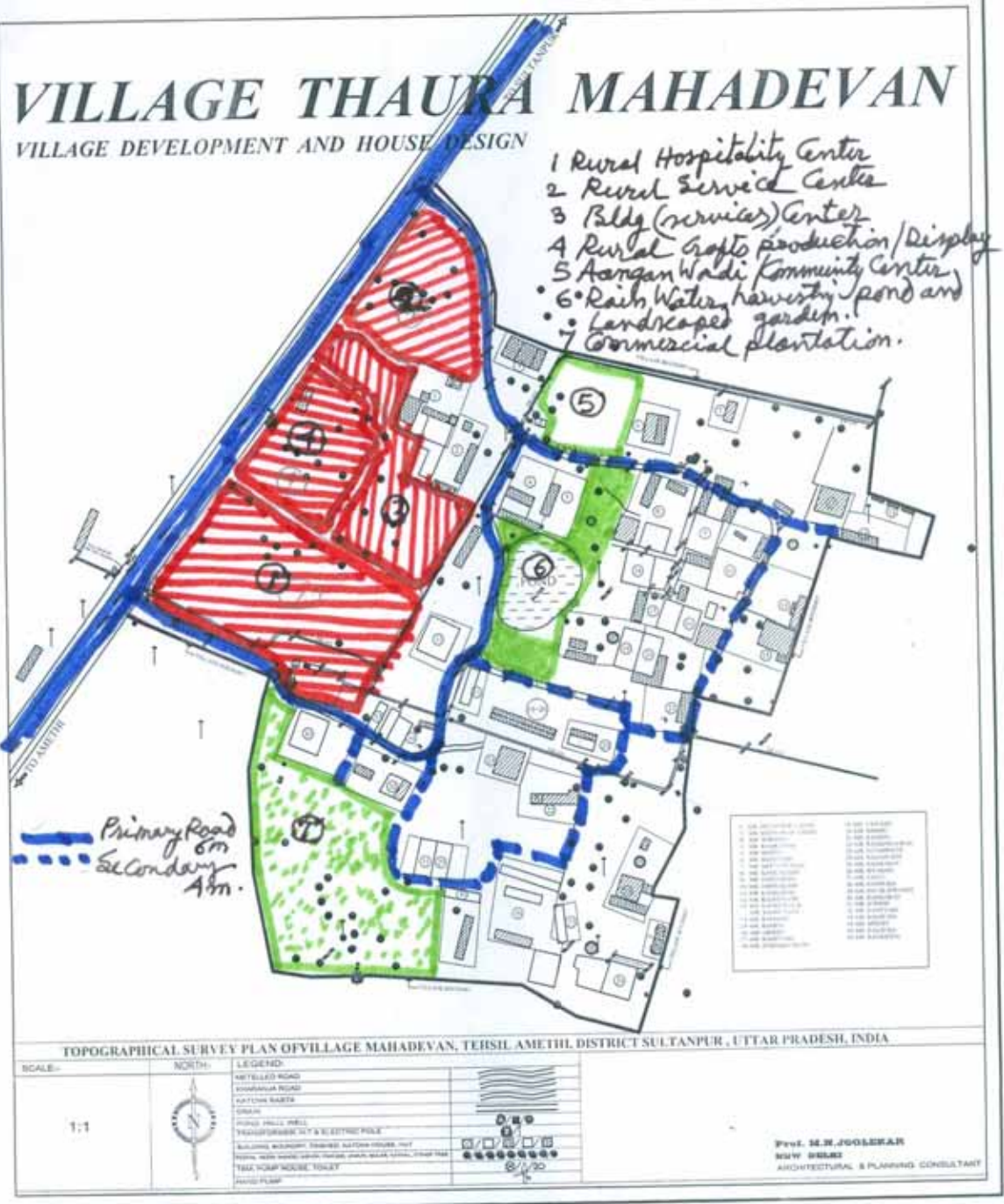


Figure 01 : DEVELOPMENT PLAN CONCEPT For Village THAURA MAHADEVAN

5) COMMERCIAL PLNTATION: Area :

The area has existing organized channels as well as Pumping system for provision of water for agricultural purposes. Tracts of unused land can be used for commercial plantations, either for fruits or for oil producing plants like JETROPA. However identification of plants for such commercial utilization will need a rsthher detailed study.

6) RAIN WATER HARVESTING: Area :

There exists a pond in the center of village. It is proposed to develop this area

by brick / tile lining of the redefined pond area (Holding capacity) and proper landscaping. The surface drainage and roof top water will be collected. To minimize the cost of collection to make the system viable, houses within a radius of km. from the pond only will be covered. Surface drainage water will be collected from the entire village area. Specific recommendations can only be made after a detailed study under separate assignment.

7) IMPROVED ACCESSIBILITY

Circulation system in villages is generally pedestrian and slow moving vehicle oriented. Primary roads will be 7.5 mtr wide with asphalt finish over WBM. Secondary roads with 4 m width will be of interlocking concrete tiles.

8) TOTAL SANITATION: 75% houses have "Leach pit" latrines. To achieve total sanitation provision of only 07 toilet units is required. All toilets are detached only. Of these only 9.52% are within a distance from house, 38% within 5-8mts and rest are at a distance more than 8 mts.

9) POTABLE WATER: No household has treated water. 50% houses have Hand Pump, while 42.86% houses have well. 75% houses own source of water supply, while rest depend on community source. 64% houses have access to water within 10mts from house, 18% have accessibility within 10 to 20 mts, rest more.

Organized water treatment on smaller scale will be uneconomic. A simple filter treatment unit of a size of earthen water storage vessel used commonly in village houses has been developed by Center of Science for Villages, WARDHA is proposed to be provided. In fact this can be manufactured in the Rural Building Center proposed to be located in this village. Refer Annexure .

10) HOUSING STOCK AND NEED :

Village hamlet has about 28 houses. Only 7 % houses are Pucca and 60% houses Kuchha. Kuchha houses primarily consist of thatch (60%) and tin shed (7%). 46% houses have mud for walling, brick wall with mud plaster & cement plaster for 18 and 28 % respectively.

this Housing satisfaction reflects acceptance of present status by 50% households. However 85% households also need additional space. 98% households also feel that extensions to the house are possible.

It is however clear that every household is in need of housing that may

come up in the form house extensions. With lower level of affordability traditional materials like mud, brick and thatch will be used. Construction of new houses will depend on generation of employment opportunities as well as splitting of joint family house holds due to younger children wanting to have separate houses. Availability of vacant land will not be a problem except that ownership of land is unclear and its' availability for general public cannot be ascertained.

10.1) UPGADATION

Additions to existing Houses and upgrading the structure will constitute the main requirements in villages. Up gradation needs arises out of requirement of resistance against fire, weather, disasters as well as requirement of safety and security as well as durability.

WALLING and ROOFING are two main components of up gradations Cost matrix presented in this study for alternate options, are therefore indicated for different combinations of walling and roofing materials.

UPGRADATION technologies are particularly needed where mud and biomass is largely used. Some of the important up gradation components are :

- 1) Strengthening structure (refer Fig.06)
- 2) Roof change (Fire resistant biomass roof (Refer fig.04 & 06)
- 3) Protecting the external surfaces of wall in mud (Adobe & clay tiles, water resistant mud plaster) (Figure Fig. 02,03 &07)
- 4) Protecting foundation (Figure 08)
- 5) Retrofitting for improving earth quake resistance (Fig. 05)

Place face tile as shown. Place the clay mass at the back, working the mass under and dovetail key. ✓



Figure 02

NON ERODABLE MUD PLASTER

Soil (clay-20to25%, sand-40to45%, 6to20plasticity index) free from inorganic material is to be used. Wheat straw is added to dry soil and thoroughly mixed. Mixture kept wet and well kneaded. Molten bitumen is slowly added to the kerosene oil. 53 kg of bitumen and 10.5 liters of kerosene added to one cubic meter of dry soil.



FIRE RETARDANT THATCH

.Pressed Thatch panels are prepared by laying thatch between two bamboo mats held together by binding wires. Panel size as per roof size. After lying the panels on the roof, these are treated with

ordinary mud plaster in first layer (mud & straw) and by non erodible mud plaster in second layer. Cracks in dried roof if any are filled with mud plaster and then two coats of cowdung slurry with water repellent are applied



SOURCE : AWAS VIAS Ltd. JAIPUR, TECHNOLOGY PARK

Figure 04

IN-SITU RECONSTRUCTION

VILLAGE TEMBHE, AUSA TALUKA, LATUR DISTRICT



Through stones and lighter roof



RETROFITTING

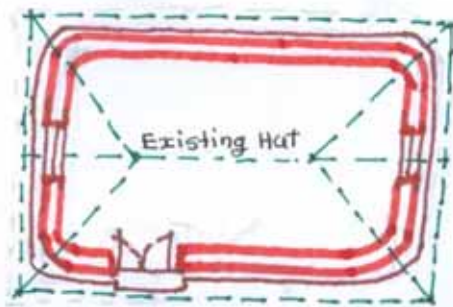
Bracings and brackets



Seismic bands at lintel, roof and plinth levels

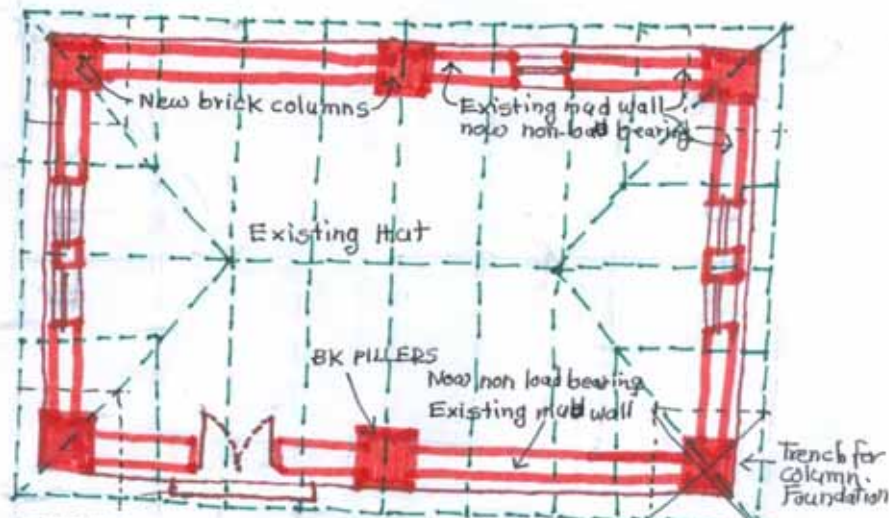
Photographs by Prof. M.N.JOGLEKAR - HUDCO Rehabilitation Project, Village THEMBE, AUSA Taluka, Latur district, MAHARASHTRA State

Figure 05 , showing structural strengthening of mud houses



STRENGTHENING OF EXISTING MUD HUT

EXISTING HUT WITH MUD WALLS
AND BAMBOO & BIOMASS ROOF



STRUCTURAL STRENGTHENING OF HUT BY
INTRODUCTION OF BK PILLERS

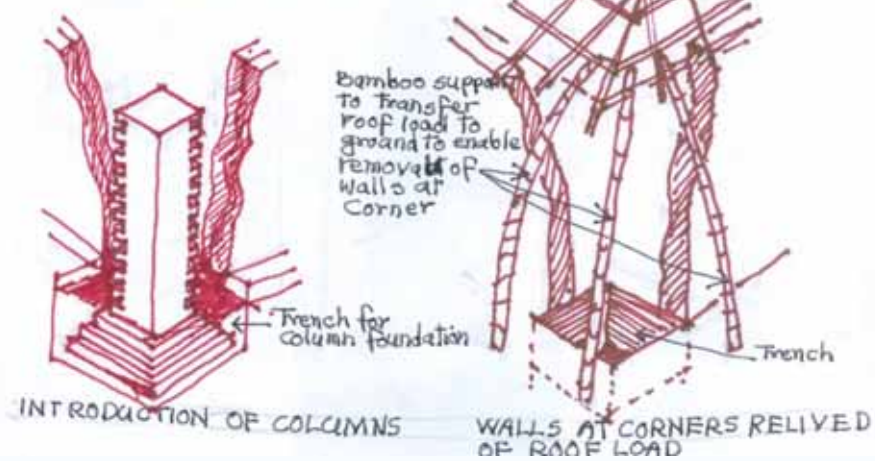


Figure 06

10.02 : The present study is not exploring up-gradation as an option. Yet it is quite clear that the least cost housing in rural areas is mainly possible through up-gradation options. However up-gradation package will mainly depend upon extent of temporary/ kachha construction and also need of Services. Permutations and combinations of various components of up-gradations & service components will be innumerable and are difficult to estimate on Typological basis, unlike the options for walling and roofing specifications available. This study therefore concentrates on Typological approach to both House design and specifications for key components of walling & roofing.

10.03 : In the scenario of current rural set up in INDIA, most widely used materials are clay/mud for walling and biomass for roofing. Fig. 06 indicates the methodology for converting load bearing mud wall to filler wall with Bk. Pillars to take roof load and also facilitate roof conversion enabling G+1 construction. Load of roof is transferred to Bamboo/wooden ballies at points over wall where Bk. Pillars are to be constructed. Columns are constructed and then the roof truss is supported on these. Thus without demolishing the existing hut, strengthening the walling and roof change is also possible.

10.04 : Biomass roof can also be applied non erodible mud plaster to make it fire retardant. Once the walling is converted permanent structure several options for roofing, flat or sloping.

10.04 : External surfaces of mud wall can also be protected by applying non erodible mud plaster or line it up with burnt clay tiles, below the window or construct a stone wall up to sill level.

10.05 : A major requirement in rural areas is to make houses disaster resistant, be it earth quake, cyclone or flooding. Figure 05 shows various methods of retrofitting, such as Steel braces to secure wall to wall or to roof, seismic bands, through stones to strengthen and bond external and internal surfaces of thick stone wall, adding of a roof band with vertical reinforcement introduced to tie up wall and roof etc.

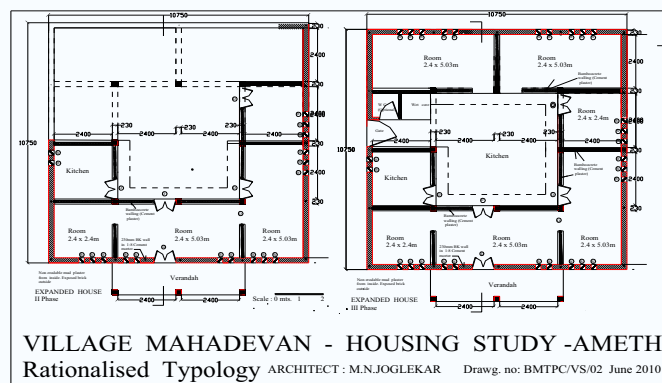
All these measures are means of achieving the strong structure or prolong the life of present temporary rural hut at a cost, 60 to 70 % less than new construction. If a 30/35 sq. mts house with economic specification is to cost Rs. 100,000/-, up gradation or retrofitted house can give a house in around less than Rs. 30,000/- Besides many of these construction methods are relatively simple and can be practiced by the beneficiaries themselves for their own house, acquire in the process skills to upgrade houses of others and avail a source of income generation. In many rehabilitation projects in Gujarat as well as UTTARAKHAND, this approach has been successfully implemented.

11 : COST, TECHNOLOGY & IMPLEMENTATION OF NEW RURAL HOUSE

In rural housing traditional housing typology and materials are as important as construction systems. Mass housing in rural system is a rarity, except for disaster rehabilitation. User occupier/ beneficiary is most important both for dictating lifestyle typology and self help. User Occupier not only include humans but also domestic animals that are integral part of rural housing typology. Typologies that exist in the village THAURA MAHADEVAN are identified earlier.

11.1 : Based on these, a new design for a rural house has been developed and used in this study to explore cost and material options.

Figur07



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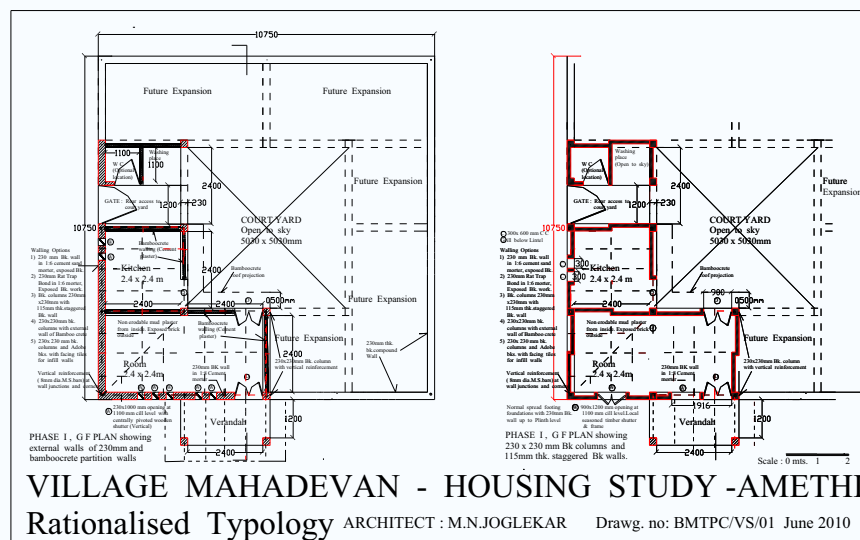


Figure : 07 A

n

Figure 07 and 07A indicate the proposed design developed on the basis of traditional typology that exists. Rural houses have always developed, on the basis of incremental growth concept. Construction systems are simple and are amenable to self help construction. Proposed design is on the basis of central courtyard, and incorporates four stages of growth. First phase covers a built up area of sq.mts. and includes a W C and open bath. Inclusion of W C is consistent with the total sanitation program that needs to be promoted.

11.2 : Cost effectiveness in rural development depends on local availability of materials and locally practiced construction methods. A variety of materials are locally available, though emphasis is on one or two dominant materials for walling and roofing options. At the same time these are also incremental in nature, moving from the temporary concept to various levels of permanency. For example one may start with biomass roofing and end up with R C C roof. Similar ranges are also available for walling. In order to assess the implication on cost of various material options for walling and roofing, a cost matrix has been developed, indicating the plinth area rate of construction that can be achieved assuming no involvement of Beneficiary.

Walling options

- 1) Brick pillars with split bamboo filler walls in mud plaster
- 2) Brick pillars with split bamboo filler walls in cement plaster
- 3) Bamboo pillars with split bamboo filler walls in mud plaster
- 4) Bamboo pillars with split bamboo filler walls in cement plaster
- 5) Adobe with burnt clay tile facing
- 6) Stabilised mud blocks
- 7) Brick columns with ½ Bk. Thk. Walls
- 8) Rat trap bond in 23cm thk load bearing bk.wall
- 9) 23cm thk load bearing bk.wall

Roofing options

- 1) Biomass
- 2) Country tiles
- 3) Mangalore tiles
- 4) Micro Concrete tiles
- 5) C G I Sheets
- 6) Bamboo crete in slope
- 7) Corrugated Bamboo sheets

- 8) Conocal tiles – Shell
- 9) Conocal tiles - Slope
- 10) RBC
- 11) RCC cast in situ

Common Specifications

- 1) Spread footing in foundation
- 2) Earth resistant structure i.e 10mm bands at plinth, lintel & roof level with vertical reinforcement anchored in foundation
- 3) Super structure and roofing as indicated above in combination as indicated in Matrix (Figure 08)
- 4) Slit window as per design
- 5) Door shutters and frame of secondary species of seasoned locally available timber
- 6) Leech pit latrines
- 7) Community hand pump for water supply and provision of locally made water filter developed by Center of Science for Villages. WARDHA, Maharashtra state
- 8) Internal electrification

11.3 COST MATRIX (Refer Fig. 08 A & B)

Cost Matrix is a good tool for comparative analysis and decision making for assessing impact of various options available. The estimates are on the basis of local rates compiled by Awas Vikas Ltd. Jaipur who have implemented a project in Amethi town and technology inputs by Center of Science for villages, Wardha. Estimates do not consider the self help labour. Allowance for this will further reduce the cost.

A glance at the Matrix obviously indicates that

- 1) The least cost option is emerging from the use of Biomass both for the walling as well as roofing components (A3). Bamboo columns with split bamboo filler walls and mud plaster, provide a Plinth area rate of Rs.4253.73/sq.mtr (Rs. 395.33/Sq.ft) For the first phase plinth area of 25.8 sq. mts, total cost of this Rural house is estimated as Rs. 01,09,575/-
- 2) However use of Bamboo or similar biomass material gives a feeling or sense of temporary construction. Non erodible mud plaster as well as fire retardant thatch have increased the life span and permanency of this option. What is most important is that this option is amenable to beneficiary participation in construction process.
- 3) With Biomass as focus for cost effective option for Rural Housing, next acceptable option that emerges is A-1, which replaces Bamboo pillars of A-3, by brick pillars. Roofing remains same. The introduction of Brick pillars add to the structural stability and

increases sense of permanence. Increase in P A rate of construction is only Rs.80.4 / sq.mt. (with mud plaster) and Rs.979/sq.mts. over option A-3.

- 4) A more acceptable option that emerges is E-1, where the biomass roof is replaced C G I sheet roofing. The P A rate of construction is Rs. 4708.33/ Sq.mts (Rs.437. 7/sft) This option gives relatively acceptable roofing option og C G I sheet, a higher level of permanency for roof, though still wanting in terms of thermal comfort. Total cost of first phase house of 25.8 sq.mts will be Rs. 01,21,286/-However changing mud plaster to cement plaster increases Plinth area rate of construction by over Rs 1000/ sq.mt

Figure 08 - A

COST MATRIX – Plinth area rate of construction in Rs/sqm and sft

ROOFING options	Biomass	Country tiles	Mangalore tiles	Micro-concrete tiles	CGI sheets	Bamboo crete in slope	corrugated Bamboo sheets
WALLING options							
*Bk.pillars with Bamboo filler walls (mud Plaster)	4334.13sm 402.8 sft	6347.32sm 569.9 sft	4605.99sm 428sft	4633sm 430.57sft	4708.33sm 437.7sft	4579.93sm 425.64sft	6081.74sm 565.22sft
*Bk.pillars with Bamboo filler walls (Cement Plaster)	5232.14sm 486.26sft	6422.75sm 596.86sft	5589.42sm 519.46sft	6105.58sm 567.43sft	5915.22sm 549.74sft	5477.95sm 509.1sft	6205.5sm 576.52sft
*Bamboo pillers with Bamboo filler walls (Mud Plaster)	4253.73sm 395.33sft	5370..61sm 499.13sft	4508.77sm 419sft	4547.24sm 422.6sft	4855.94sm 457.29sft	6072.98sm 564.4sft	6001.31sm 557.34sft
*Bamboo pillers with Bamboo filler walls (Cement Plaster)	5231.8sm 486.23sft	6336.49sm 588.89sft	5503.68sm 511.49sft	5530.66sm 514sft	5834.07sm 542.2sft	7051.1sm 655.3sft	6973.43sm 648.64sft
*Adobe with burnt Clay face tile	4493.83sm 417.64sft	5610.76sm 521.45sft	4765.68sm 442.9sft	4792.72sm 445.42sft	5096.09sm 473.61sft	4739.65sm 440.48sft	6741.15sm 580sft
*Stabilised mud Blocks	4493.83sm 417.64sft	5613.82sm 521.73sft	4768.78sm 443.19sft	4795.79sm 445.7sft	5099.14sm 473.89sft	4742.7sm 440.37sft	6244.53sm 580.34sft
*Bk columns,1/2 bk Thk. Walls	5082.99sm 472.39sft	6273.1sm 583sft	5540.25sm 505.6sft	5467.28sm 508.11sft	5766.07 sm 535.88sft	5416.31sm 503.37sft	6916.38sm 642.75sft
*Rat trap bond 23cm Thk. Load bearing bk	4818.63sm 447.82sft	5935.92sm 551.62sft	5090.48sm 479.03sft	5117.5sm 475.6sft	5420.88sm 528.35sft	5064.44sm 470.67sft	6566.25sm 610.24sft
*23cm thk. Load Bearing bk wall	5041.89sm 469.787sft	6171.82sm 573.79sft	5326.77sm 495sft	5353.76sm 497.56sft	5657.16sm 525.76sft	5300.7sm 492.62sft	6802.5sm 632.2sft

Figure 08-B

COST MATRIX – Plinth area rate of construction in Rs/sqm and sft

ROOFING options	Conical tiles		RBC	Cast in situ	
	Shell	Slope		R C C slab	i
*Bk.pillers with Bamboo filler wall (mud Plaster)					
*Bk.pillers with Bamboo filler walls (Cement Plaster)					
*Bamboo pillers with Bamboo filler walls (Mud Plaster)					
*Bamboo pillers with Bamboo filler walls (Cement Plaster)					
*Adobe with burnt Clay face tile	5902.21sm 548.53 sft	6684.33sm 621.22sft	6506.22/sm 604.67/sft		
*Stabilised mud Blocks	5905.29sm 548.82sft	6687.41sm 621.5sft	6521.24sm 606.06sft	6671.6sm 620 sft	
*Bk columns,1/2 bk Thk. Walls	5576.77sm 611.22sft	7358.9sm 683.91sft	7384.34sm 686.27sft	7534.7sm 700.25sft	
*Rat trap bond 23cm Thk. Load bearing bk	6227sm 578.72sft	7009.12sm 651.4sft	6967.37sm 647.52sft	7117.mt 661.56sft	
*23cm thk. Load Bearing bk wall	6463.28sm 600.67sft	7245.4sm 673.36sft	7294.65sm 677.94sft	7445sm 691.9sft	

Continued from page 23

- 5) It is also noted that the mud plaster application is substantially cost effective in comparison with cement plaster. Mud being local material, costs least, often no cost. Mud plaster is a traditional material, practiced over ages, needs minimum skill and most villagers, particularly women folk. This means beneficiary participation and contribution of self labour is possible. However mud application needs to be rationalized. Hence use of non erodible mud plaster and fire retardant thatch needs to be promoted.

- 6) Application of other mud/soil based products such as stabilized earth blocks and adobe with burnt clay tile fascia are other materials that provide P A rate of construction that varies between Rs. 400/450 per square foot.
- 7) Use of burnt clay bricks, either as 23cm load bearing Bk. wall or Rat Trap Bond, will be common and easy. However average P A rate of construction is well above Rs. 450/-sq.ft or Rs. 5000/sq.mt.
- 8) Maximum P A rate of construction is around Rs. 700/sft or Rs.7535 per sq. mt. (M7, M9) where roofing is of RCC slab. RCC slab gives a vary high level of sense of permanence as well as possible vertical expansion.
- 9) Reinforced Brick Concrete (RBC) Slab is practiced extensively in many parts of U P. Bricks are locally available in many parts and masons are well versed in a variety of use of Bricks. Certain options of RBC roofing options in combinations with walling of, Adobe with burnt clay face tile, stabilized mud blocks and brick walls of different types have been explored. Advantage of R B C is flat roof and vertical expansion. Plinth area rate however varies from Rs. 6506.22/sq.mt (604.67/sft) for Adobe with clay tile;Rs 6521.24/sm (606/sft) with stabilized mud block walling and Rs. 6967 to 7384/sm (Rs.647.5 to 678/sft) for various types of Bk. Walling. This options is likely to be preferred by rural families as it brings them closer to their perception of permanacy and equity with urban population.
- 10) Options referred (09) above need further exploration to reduce cost. One possibility is to explore impact of self help/labour contribution on cost reduction. This is discussed in forgoing paragraph at 11.4

11. 4 : SHELTER AFFORDABILITY Shelter affordability is main concern in rural areas due to extremely low incomes. This is despite the fact that Land & locally available materials do not provide serious constraint. Also rural housing problem is not of constructing new houses, as much as it is, of providing service infrastructure and house extensions. Shelter affordability is not a function of one single criteria, but is product of several issues involved. Besides land & material, covered area, local life styles, local construction traditions, access to finance, availability of labor etc. affect the overall affordability. Cost Matrix has explored the options available for material and construction systems. One more option available in rural system is self help labor contribution. Most rural house forms are amenable to self help in construction. To assess this it is important to know break up of material and labor cost. Approximate break up on the basis of experience (Contributed by Center of Science for Villages, WARDHA) is as follows :

**For Option (L-5.) R B C ROOF IN COMBINATION WITH ADOBE WALLING WITH
- TILE FACING**

S.no./ Item -	Total cost (Rs) of item	Labor Cost		
		%	(Rs)	Unskilled
1) Excavation -	02,026	100*	02,026	02,026
2) Providing PCC 1:3:6 for the spread Bk. footing	07,175	030**	02,152	01,076
3) II class Bk. Masonry for foundation, plinth, base wall	30,440	035 **	10,654	05,327
4) Half Bk. Thk. Wall for leach pits and W C	03,762	030**	01,128	00,564
5) Damp proof course (RCC)	03,600	-----	-----	-----
6) Murum filling in Plinth	03,940	50%*	01,970	01,970
7) Providing PCC 1:3:6 for IPS flooring	07,425	30%**	02,227	01,113
8) Providing I P S flooring cm 1:6	02,949	30%**	00,885	00,443
9) Brick Pillars 0.23 x 0.23cm	04,810	50%**	02,805	01,403
10) Clay tile faced adobe wall with pointing & plaster	19,447	50%**	09,723	04,861
11) Outside cement pointing for clay tiles over Adobe	02,746	30%**	00,824	00,412
12) 15mm stabilized mud plaster from inside	03,576	75%**	02,682	01,342
13) Providing & fixing wood & Bamboo doors/window	05,400	-----	-----	-----
14) Providing & fixing Slit window as per design	01,200	-----	-----	-----
15) R C C lintels	09,067	30%***	02,720	00,408
16) Reinforced Brick concrete roofing	14,770	30%***	04,431	00,650

17) M S Reinforcement	23,455	-----	-----
18) Patta plaster	06,574	75%**	04,930 02,465

*100% unskilled, ** 50% unskilled, *** 15% unskilled

Total Unskilled Rs. 24,060/- + 02,406 (10% for Elect.+ contingencies)= Rs.26466 (15.8%)

Total Labour Rs. 49,157/- +04,916 (10% for Elect.+ contingencies)= Rs.54,073 (32.26%)

Total saving that can be achieved by labour contribution can be between 15 to 35%.

12 : Least cost of a 25.8 sq.mts Rural house is costing 1,09,575/- (A-3) If we assume that - 20% cost can be attributed to saving on account of labour cost, house cost will still be rs.87,660/-. As per L-5 type specifications discussed at 11.4 cost of this house 4 will be Rs.1,41,134/- - - In either cases it is clear that Rs. 50,000/- available under any scheme is inadequate for rural house.

12.01 :What can be done in Rs. 50,000/-

- ONLY ANSWER IS A SKELETAL OR PARTIAL HOUSE

A skeletal house will consist of a Pit latrine and a room / kitchen of 2.4 x 2.4m (CORE HOUSE I - Area 15.73 Sq.mts) or room of 2.4mx 2.7 + WC (Core House II - Area 10.56 sq.mts) which can expand to full house. (Refer Fig.09)

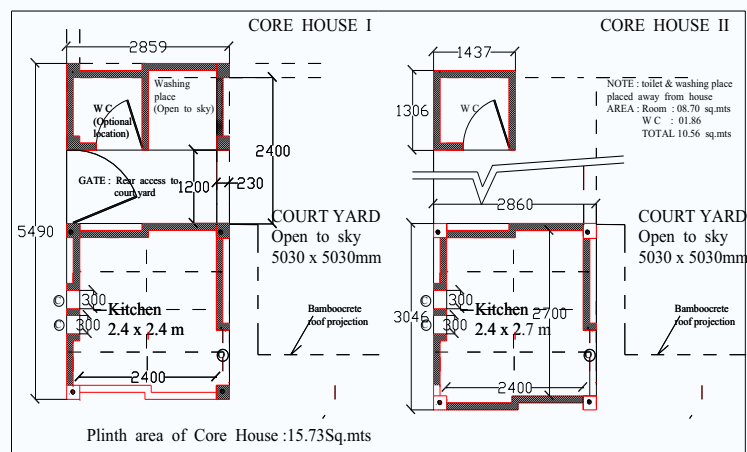


Figure 09

Various estimates prepared indicate minimum plinth area rate as Rs. 4253.73 Sq.mt (Rs.395.33/sft) for Option A-3. At this rate construction cost for Core House I & II will be Rs. 66,911/- and 44,919/-. Considering impact of self help (20% cost reduction) unskilled labor, these costs will be Rs. 53,528/- and 35,935/-. While option A-3 has Bamboo specifications, that may not be preferred, one may find out cost of these Core Houses for option L-7, which uses bricks both for roofing and walling, following costing emerges. Plinth area rate of L-7 option is Rs.7384.34/sq.mt.(Rs.686.27/sft) At this rate construction cost for Core House I & II will be Rs. 1,16,155/- and 77,978. Considering impact of self help (20% cost reduction) unskilled labor, these costs will be Rs. 92,924/- and 62,382/-.

CONCLUSION

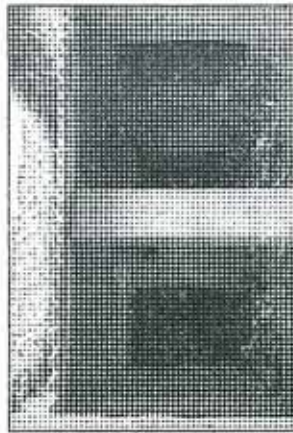
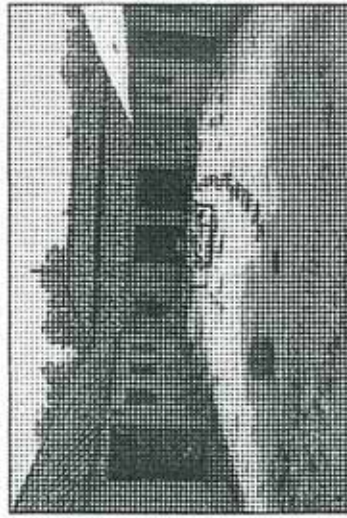
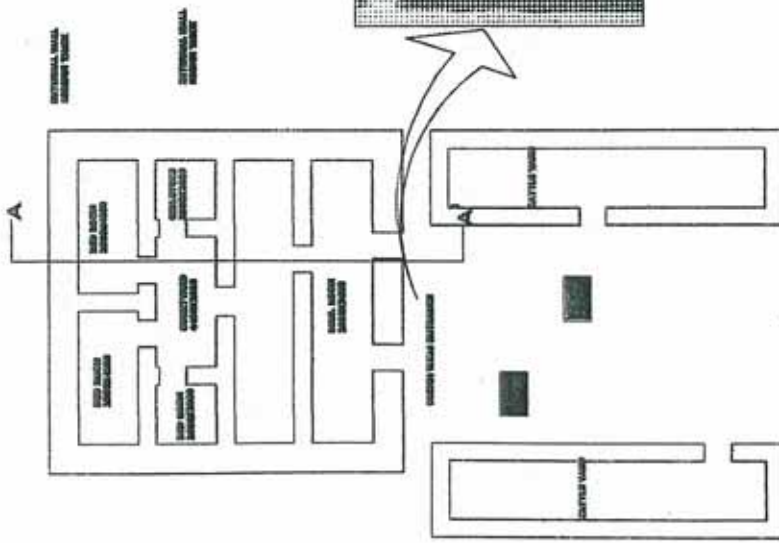
- 1) Most urbanites, as a reaction to woes of urban life, have romantic notions of rural housing with cool mud walls, large houses, sloping mangalore tile roofing, and splattering of arts and crafts objects, adding to the aesthetic values. However, despite inadequate incomes, Rural population aspires for the urban life styles and desires to have flat R C C slab for roofing instead of biomass, cement plaster in place of mud, steel windows in place of wooden / bamboo etc.
- 2) Normally, major requirement of shelter in rural area is for improvement and up gradation. Construction of new houses in rural areas will be required only in case of growing villages or in case of disaster rehabilitation. Ceiling of Rs. 50,000 is workable in case of up gradation, improvement and structural strengthening. Exact requirement will depend on the present state of house condition. Even then minimum livable shelter can be constructed through improvement. However it has been observed in disaster rehabilitation projects, that beneficiaries want to opt for total renewal.
- 3) In case of new house construction minimum funding required will be at least Rs. 100,000/- looking at the aspiration of rural beneficiaries, depending upon the level of permanence to be achieved, this requirement can be up to 150,000/- as can be seen from the abstract of estimates of various roofing and walling combinations indicated in the Cost Matrix (Fig. 08 A & B)
- 4) In rural areas construction systems need innovative approach. No profit no loss basis Institutions like Building Center movement need to be activated to guide beneficiaries through various processes of reconstruction, including beneficiary participation. A thorough review of implementation of house construction in rural areas under schemes like Indira Awas Yojana, can provide good indicators.

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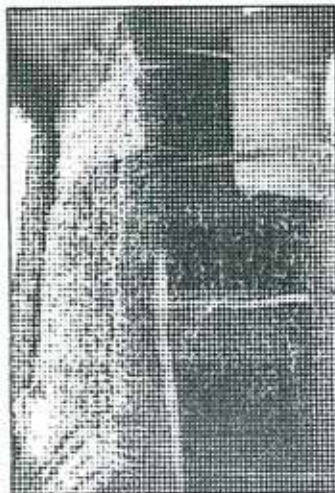
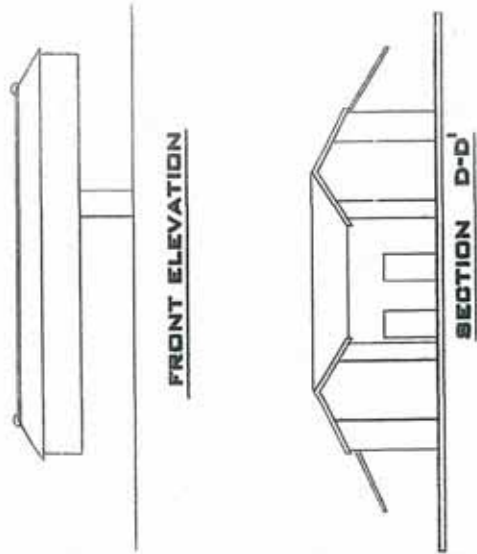
List of Annexures

- 1) Plans, sketches and photographs of existing House Typology S.no 01 to 11**
- 2) Plan of existing Village Thaura Mahadevan**
- 3) Development Concept for Village Thaura Mahadevan**
- 4) Cost Matrix**
- 5) Abstract of estimates**
 - A 01 to 09**
 - B 01 to 09**
 - C 01 to 09**
 - D 01 to 09**
 - E 01 to 09**
 - F 01 to 09**
 - G 01 to 09**
 - H 05 to 09**
 - J 05 to 09**
 - L 05 to 09**
 - M 05 - 09**
- 6) Proposed new Village House**
 - BMTPC/VS/01**
 - BMTPC/VS/02**
 - BMTPC/VS/03**
- 7) Village Survey proforma**
- 8) Low cost water filter developed by CSV WARDHA**

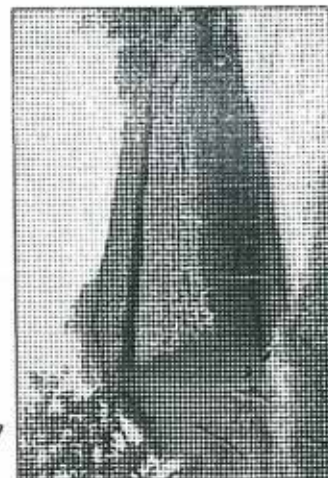
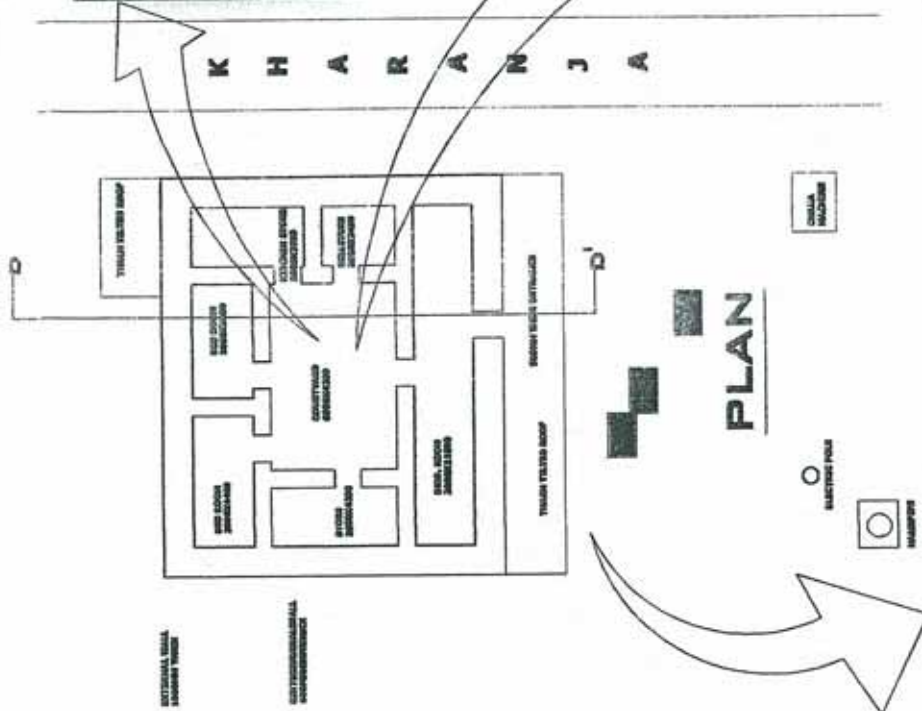


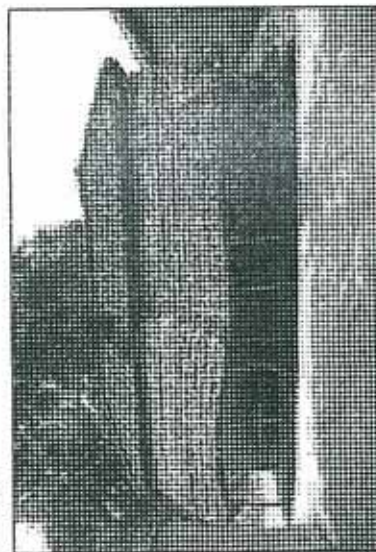
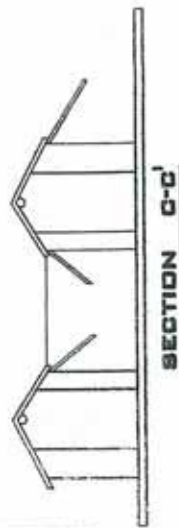
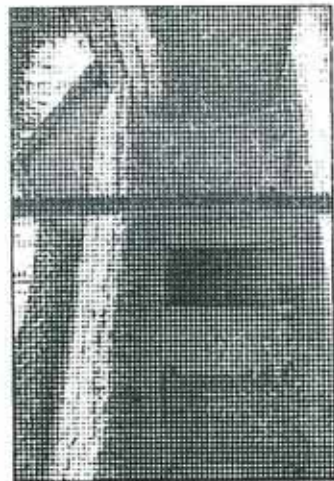
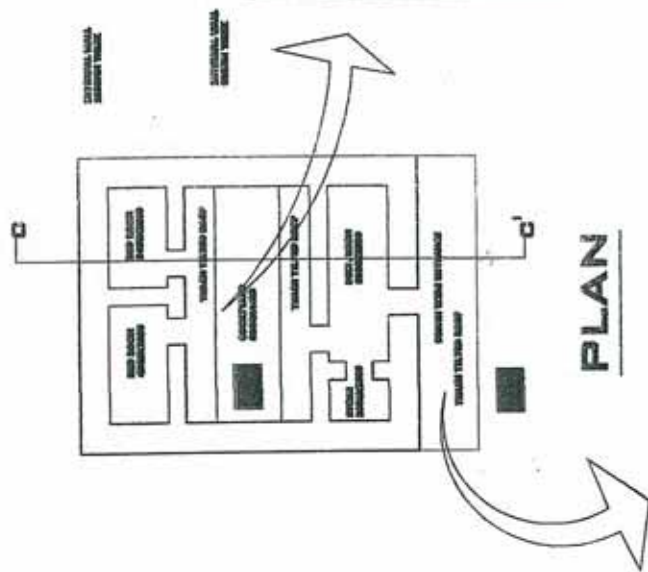
GANGARAM

(TOTAL AREA=136 SQ.M)



RAMKIBODH
TOTAL AREA=180 SQ.M

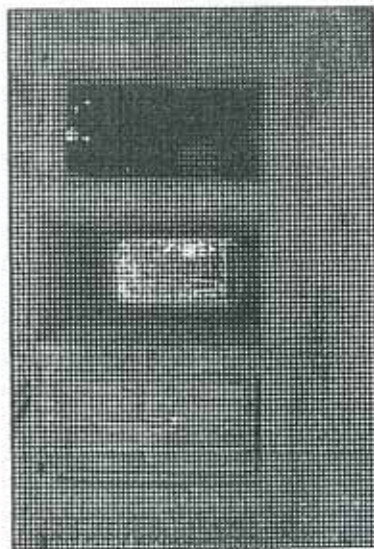




RAMKIRPAL

(TOTAL AREA=133 SQ.M)

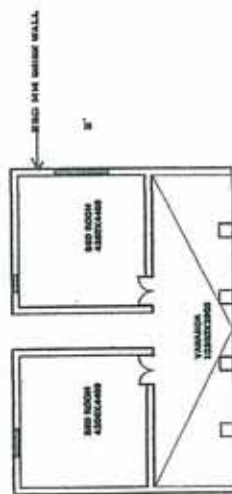
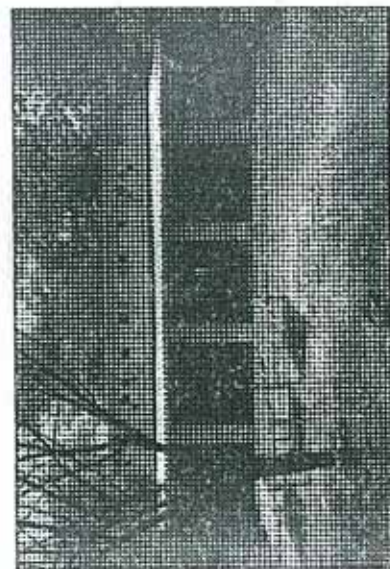
HOUSE OF RAMLAKHAN



SECTION-22'



LEFT SIDE ELEVATION

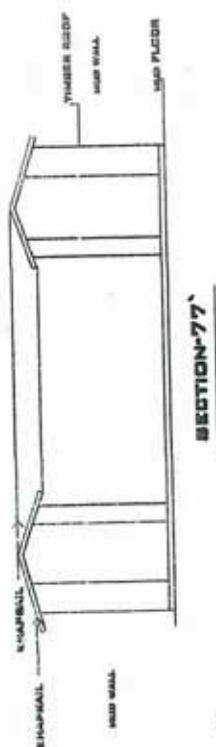
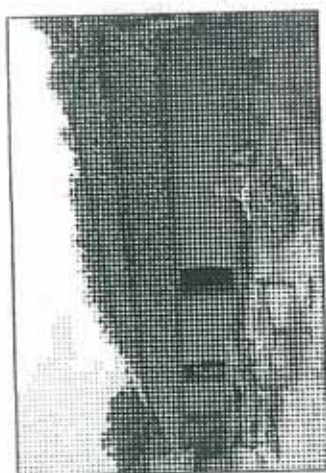
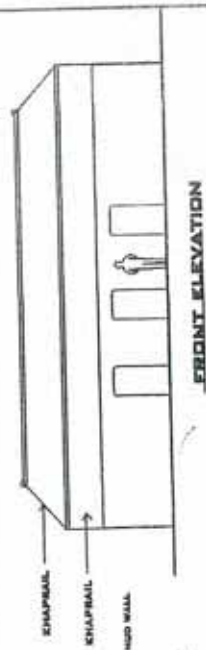
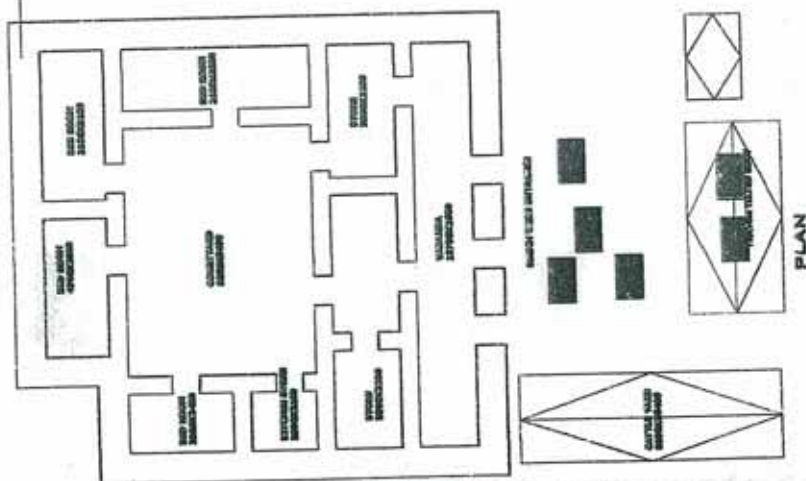
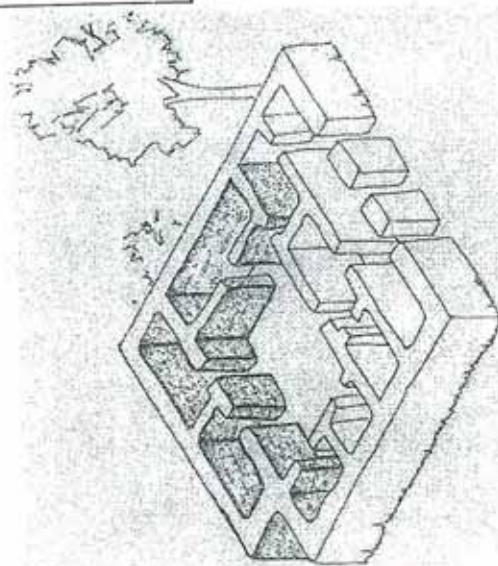
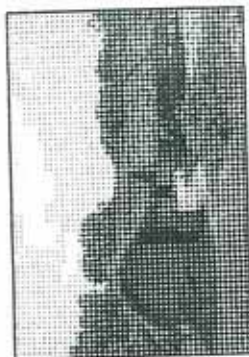


PLAN



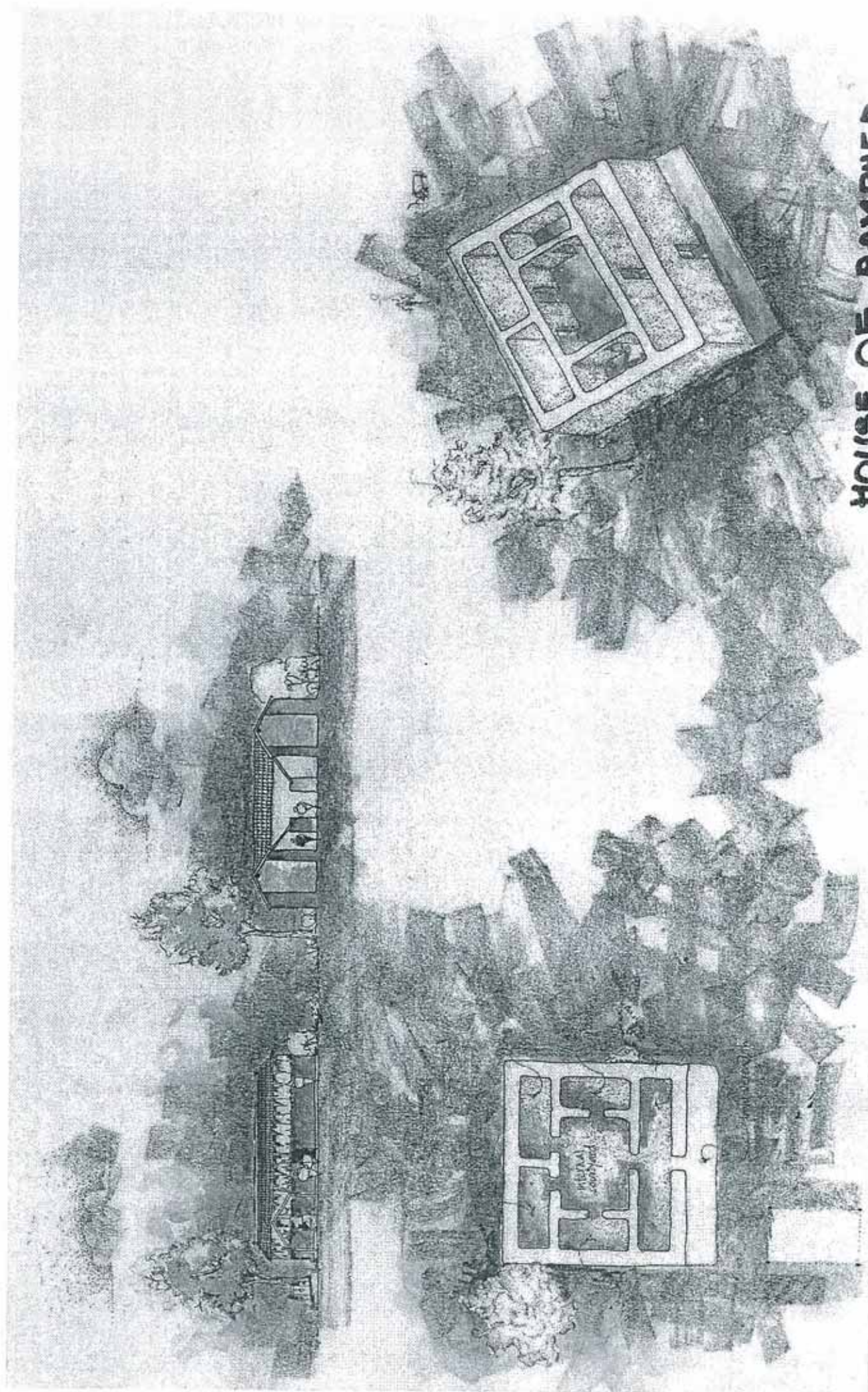
FRONT ELEVATION





HOUSE OF OMPRAKASH

HOUSE OF RAMPHER



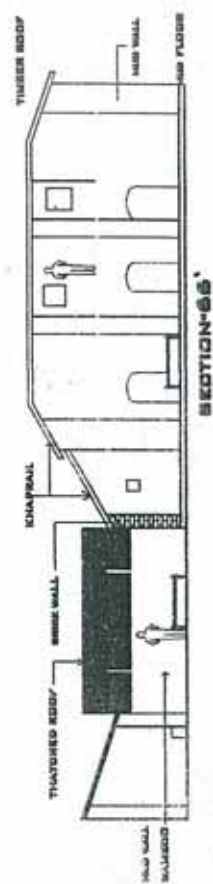
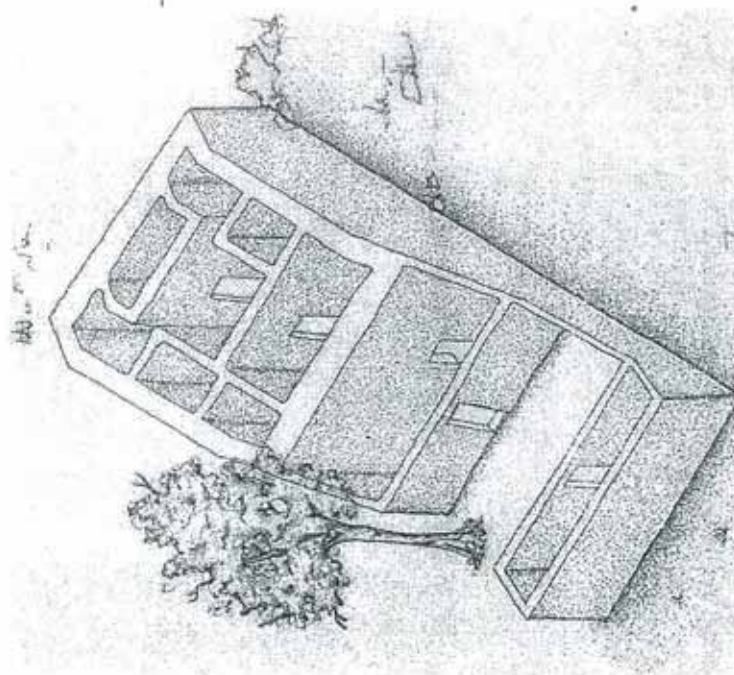


PLAN

TOTAL AREA=179 SQ.M



PLAN



EXOTIC-000

1:1



LEGEND:
 METalled ROAD
 KATKATA ROAD
 DRAIN
 POND, HALL, WELL
 TRANSMISSION, H.T. & ELECTRIC POLE
 SURFACE, ROADSIDE, FENCE, POLE, JUNCTION, CROSSING, GATE
 TRAIL, PUMP, HOUSE, TOILET



S.R. SURVEYORS
 20, RAJAWADI ROAD, P.O. MAHARAJA NAGAR, LUCKNOW
 0522-2600111 (RESIDENTIAL) 2600077 (OFFICE)

ARCHITECT:-
DR. RAJESH KUMAR
 58, RAJAWADI GARDEN, LUCKNOW

TOPOGRAPHICAL SURVEY PLAN OF VILLAGE MAHADEVAN, TEHSIL AMETHI, DISTRICT SULTANPUR, UTTAR PRADESH, INDIA



- 1. MR. KATKATA ROAD
- 2. MR. KATKATA ROAD
- 3. MR. KATKATA ROAD
- 4. MR. KATKATA ROAD
- 5. MR. KATKATA ROAD
- 6. MR. KATKATA ROAD
- 7. MR. KATKATA ROAD
- 8. MR. KATKATA ROAD
- 9. MR. KATKATA ROAD
- 10. MR. KATKATA ROAD
- 11. MR. KATKATA ROAD
- 12. MR. KATKATA ROAD
- 13. MR. KATKATA ROAD
- 14. MR. KATKATA ROAD
- 15. MR. KATKATA ROAD
- 16. MR. KATKATA ROAD
- 17. MR. KATKATA ROAD
- 18. MR. KATKATA ROAD
- 19. MR. KATKATA ROAD
- 20. MR. KATKATA ROAD
- 21. MR. KATKATA ROAD
- 22. MR. KATKATA ROAD
- 23. MR. KATKATA ROAD
- 24. MR. KATKATA ROAD
- 25. MR. KATKATA ROAD

COST MATRIX - Plinth area rate of construction -Rs/Sq. mts(Rs/sft)- for various walling & roofing combinations . Options estimated for Phase one only

Roofing Options	Biomass	tiles Country	Tiles Mangalore tiles	Micro - concrete	CGI sheets	Bamboo crete in slope	corrugated Bamboo sheets	Conical tiles			R B C	RCC Cast in situ
								Shell	Slopes			
Walling Options	A	B	C	D	E	F	G	H	J	L	M	
1) Brick pillars with split bamboo Filler walls - mud plaster	4334.13/Sm (402.8/Sft)	6347.32/Sm (569.9/sft)	4605.99/Sm (428/ sft)	4633/Sm (430.57/Sft)	4708.33/Sm (437.7/Sft)	4579.93/Sm (425.64/Sft)	6081.74/Sm (565.22/Sft)					
2) - Cement plaster	5232.14/Sm (486.26/Sft)	6422.75/Sm (596.86/sft)	5589.42/ Sm (519.46 / Sft)	6105.58 /Sm (567.43/sft)	5915.22/Sm (549.74 /Sft)	5477.95 /Sm (509.1 /Sft)	6205.5 /sm (576.52/sft)					
3) Bamboo pillars with split bamboo filler walls - mud plaster	4253.73/Sm (395.33/sft)	5370.61/Sm (499.13sft)	4508.7/ Sm (419/sft)	4547.24/Sm (422.6/Sft)	4855.94/Sm (457.29/sft)	6072.98/Sm (564.4/Sft)	6001.31/Sm (557.34 /Sft)					
4) - cement plaster	5231.8/Sm (486.23/sft)	6336.49/Sm (588.89/sft)	5503.68 / Sm (511.49 / Sft)	5530.66/sm (514/sft)	5834.07/sm (542.2/sft)	7051.1 /Sm (655.3/Sft)	6973.43/Sm (648.64 /Sft)					
5) Adobe with burnt clay tile facing	4493.83/Sm (417.64/sft)	5610.76/Sm (521.45/sft)	4765.68/Sm (442.9/ Sft)	4792.72/Sm (445.42/Sft)	5096.09/Sm (473.61/Sft)	4739.65 /Sm (440.48/sft)	6741.15 /Sm (580/Sft)	5902.21./Sm (548.53/Sft)	6684.33/Sm (621.22/Sft)			
6) Stabilised mud blocks	4493.83/sm (417.64/sft)	5613.82/sm (521.73/sft)	4768.78/sm (443.19/sft)	4795.79/sm (445.7/sft)	5099.14/sm (473.89/sft)	4742.7/sm (440.37/sft)	6244.53/sm (580.34/sft)	5905.29/sm (548.82 /sft)	6687.41/sm (621.5/sft)	6521.24/sm (606.06/sft)	6671.6/sm (620/sft)	
7)Brick Columns and 1/2 bk. thk. walls	5082.99/sm (472.39/sft)	6273.1/sm (583/sft)	5540.25/sft (505.6/sft)	5467.28/sm (508.11/sft)	5766.07/sm (535.88/sft)	5416.31 /sm (503.37/sft)	6916.38 /sm (642.75/sft)	5576.77 /sm (611.22/sft)	7358.9/sm (683.91/sft)	7384.34/sm (686.27/(sft)	7534.7/sm (700.25/sft)	
8)Rat trap bond 23cm thk bk. walls	4818.63/sm (447.82/sft)	5935.52/sm (551.62/sft)	5090.48/sm (473.09/sft)	5117.5/sm (475.6/sft)	5420.88/sm (528.35/sft)	5064.44/sm (470.67/sft)	6566.25/sm (610.24/sft)	6227/sm (578.72/sft)	7009.12/sm (651.4/sft)	6967.37/sm (647.52/sft)	7117.8/sm (661.5/sft)	
9)23cm thk bk. wall	5041.89/sm (469.78/sft)	6171.82/sm (573.59/sft)	5326.77/sm (495/sft)	5353.76/sm (497.56/sft)	5657.16/sm (525.76/sft)	5300.7/sm (492.62/sft)	6802.5/sm (632.2/sft)	6463.28/sm (600.67/sft)	7245.4/sm (673.36/sft)	7294.65/sm (677.94/sft)	7445/sm (691.9/sft)	

Common Specifications

- 01) Spread footing in brick
- 02) Earthquake resistant structure i.e. 100mm brands at plinth, lintel & roof band with vertical reinforcement anchored in foundation
- 03) Super structure & roofing as per matrix
- 04) Slit window as per design
- 05) Door shutter & frame of secondary species of timber seasoned local wood
- 06) Leach pit latrine
- 07)Community Hand pump for water

- 1) nine walling options as in Matrix above
- 2) 11 roofing options as in Matrix above

VILLAGE MAHADEVAN - HOUSING STUDY -AMETHI Rationalised Typology

A-1

P A Rate 4334.13/Sq.mt 402.8/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split bamboo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	43.00	5340.60
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D1	2.00	Nos	1700.00	3400.00
	D2	1.00	Nos	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
16	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins	21.48	Mtr.	24.00	515.52
18	Common Rafters	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position Biomas roof panels of average thikness 4cm, well weaved with the help of	45.60	Sqm.	225.00	10260.59
Total Rs.					101497.49

Contingencies & Miscellaneous 5% of Total Rs. 5074.87

Internal Electrification 5% of Total Rs. 5074.87

Grand Total Rs. 111647.24

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Cement Plaster, Roofing - Biomass
ABSTRACT A2

P A Rate 5232.14/Sqmt 486.26/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	0	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
####	For vertical posts 3m long	34.00	Nos	35.00	1190.00
####	For half split babmoo weaving horizontally 6m long	175.00	Nos	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	

No.	Item	Qty	Unit	Rate	Amount
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
17	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
18	Bamboo Purlins	21.48	Mtr.	24.00	515.52
19	Common Rafters	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position Biomas roof panels of average thikness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
Total Rs.					122527.48

Contingencies & Miscellaneous 5% of Total Rs. 6126.37
Internal Electrification 5% of Total Rs. 6126.37

Grand Total Rs. 134780.23

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Mud Plaster, Roofing - Biomass

ABSTRACT A3

P A Rate 4253.73/Sqmt

395.33/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	44.00	5464.80
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D2	1.00	Nos	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
16	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins	21.48	Mtr.	24.00	515.52
18	Common Rafters	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position Biomas roof panels of average thikness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
Total Rs.					99614.05

Contingencies & Miscellaneous 5% of Total Rs. 4980.70

Internal Electrification 5% of Total Rs. 4980.70

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Cement Plaster, Roofing - Biomass
ABSTRACT A4
P A Rate 5231.8/Sqmt 486.23/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m				
####	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
####	For half split bamboo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
17	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
18	Bamboo Purlins	21.48	Mtr.	24.00	515.52
19	Common Rafters	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position Biomas roof panels of average thickness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
	527 1575341				
Total Rs.					122519.85

Contingencies & Miscellaneous 5% of Total Rs. 6125.99
Internal Electrification 5% of Total Rs. 6125.99

Grand Total Rs. 134771.83

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - Biomass
ABSTRACT A 5
P A Rate 4493.83/Sq. mt 417.64/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the burnt clay tile faced Adobe wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D2	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins	21.48	Mtr.	24.00	515.52
17	Common Rafters	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position Biomas roof panels of average thickness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
Total Rs.					105237.70

Contingencies & Miscellaneous 5% of Total Rs. 5261.88
Internal Electrification 5% of Total Rs. 5261.88

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Stabilised Mud Blocks walls - Mud Plaster, Roofing - Biomass
ABSTRACT A-6

P. A. Rate 4496.89/Sq. mt, 417.93/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins	21.48	Mtr.	24.00	515.52
17	Common Rafters	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position Biomass roof panels of average thickness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
Total Rs.					105309.77

Contingencies & Miscellaneous 5% of Total Rs. 5265.49

Internal Electrification 5% of Total Rs. 5265.49

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Biomass

ABSTRACT A-7

P A Rate 5082.99/Sqmt 472.39/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	0	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonry in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
16	Bamboo Purlins	21.48	Mtr.	24.00	515.52
17	Common Rafters	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position Biomas roof panels of average thickness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
Total Rs.					119034.76

Contingencies & Miscellaneous 5% of Total Rs. 5951.74
Internal Electrification 5% of Total Rs. 5951.74

Grand Total Rs. 130938.24

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Cement Plaster, Roofing - Biomass
ABSTRACT A- 8

P. A. Rate 4818.63/Sq. mt, 447.82/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins	21.48	Mtr.	24.00	515.52
16	Common Rafters	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position Biomas roof panels of average thickness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
Total Rs.					112843.72

Contingencies & Miscellaneous 5% of Total Rs. 5642.19

Internal Electrification 5% of Total Rs. 5642.19

Grand Total Rs. 124128.09

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster, Roofing - Biomass
ABSTRACT A- 9

P. A. Rate 5054.89/Sq. mt, 469.78/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pilars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.18	Cum	2645.00	29585.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins	21.48	Mtr.	24.00	515.52
16	Common Rafters	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position Biomas roof panels of average thickness 4cm, well weaved with the help of binding wire to the common rafters	45.60	Sqm.	225.00	10260.59
Total Rs.					118376.83

Contingencies & Miscellaneous 5% of Total Rs. 5918.84

Internal Electrification 5% of Total Rs. 5918.84

Grand Total Rs. 130214.51

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Mud Plaster, Roofing - Country Tiles
ABSTRACT B1

P A Rate 6347.32/Sq.mt 569.9/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the adobe wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split bambmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
16	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
17	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
18	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
20	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
21	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
Total Rs.					148643.42

Contingencies & Miscellaneous 5% of Total Rs. 7432.17

Internal Electrification 5% of Total Rs. 7432.17

Grand Total Rs. 163507.76

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Cement Plaster, Roofing - Country Tiles
ABSTRACT B 2

P A Rate 6422.75/sq.mt 596.86/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	16.42	Cum	106.00	1740.10
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the split weaven bamboo for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split bambmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
17	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
18	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
19	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
21	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
22	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
				Total Rs.	150397.41

Contingencies & Miscellaneous 5% of Total Rs. 7519.87

Internal Electrification 5% of Total Rs. 7519.87

Grand Total Rs. 165437.15

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Mud Plaster, Roofing - Country Tiles

ABSTRACT B 3

P A Rate 5370.61/Sq.mt 499.13/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo of Average dia 0.045m	37.00	Nos.	45.00	1665.00
10 a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
10 b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	44.00	5464.80
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
16	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
17	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
18	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64

No.	Item	Qty	Unit	Rate	Amount
19	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
20	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
21	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
Total Rs.					125770.18

Contingencies & Miscellaneous 5% of Total Rs. 6288.51

Internal Electrification 5% of Total Rs. 6288.51

Grand Total Rs. 138347.20

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Cement Plaster, Roofing - Country Tiles
ABSTRACT B 4

P A rate 6336.49/ Sq.mts 588.89/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	16.42	Cum	106.00	1740.10
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
10	a For vertical posts 3m long	175.00	Nos.	25.00	4375.00
	For half split bamboo weaving horizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00

No.	Item	Qty	Unit	Rate	Amount
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
17	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
18	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
19	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
21	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
22	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
Total Rs.					148389.78

Contingencies & Miscellaneous 5% of Total Rs. 7419.49
Internal Electrification 5% of Total Rs. 7419.49

Grand Total Rs. 163228.75

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - Country Tiles
ABSTRACT B 5

P A rate 5610.76/Sq.mts 521.45/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the burnt clay tile faced Adobe wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
		D 2.00	Nos.	1700.00	3400.00
		D1 1.00	Nos.	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
17	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64

No.	Item	Qty	Unit	Rate	Amount
18	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
19	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
20	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
				Total Rs.	131393.83

Contingencies & Miscellaneous 5% of Total Rs. 6569.69

Internal Electrification 5% of Total Rs. 6569.69

Grand Total Rs. 144533.21

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Country Tiles
ABSTRACT B-6

P A rate 5613.82/Sq.mts 521.73/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
17	Common Rafters Ordinary Timber - 8 cm Ø				

No.	Item	Qty	Unit	Rate	Amount
		118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
19	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
20	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
				Total Rs.	131465.91

Contingencies & Miscellaneous 5% of Total Rs. 6573.30

Internal Electrification 5% of Total Rs. 6573.30

Grand Total Rs. 144612.50

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Country Tiles
ABSTRACT B 7

P A Rate 6273.1/sq.mt 583/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	16.42	Cum	106.00	1740.10
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonry in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
17	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
19	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
20	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
Total Rs.					146904.69

Contingencies & Miscellaneous 5% of Total Rs. 7345.23

Internal Electrification 5% of Total Rs. 7345.23

Grand Total Rs. 161595.16

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Country Tiles
ABSTRACT B - 8

P A rate 5935.52/Sq.mts 551.62/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foudnation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
15	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
16	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64

No.	Item	Qty	Unit	Rate	Amount
17	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
18	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
19	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
				Total Rs.	138999.85

Contingencies & Miscellaneous 5% of Total Rs. 6949.99

Internal Electrification 5% of Total Rs. 6949.99

Grand Total Rs. 152899.84

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
Roofing - Country Tiles
ABSTRACT B - 9

P A rate 6171.82/Sq.mts 573.59/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.16	Cum	2645.00	29565.81
11	Providing cement plaster 1"4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1				
		D 2.00	Nos	1700.00	3400.00
		D1 1.00	Nos	2000.00	2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
15	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
16	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64

No.	Item	Qty	Unit	Rate	Amount
17	Providing & Fixing in position Split Bamboo in to halves of 5 cm dia. Bamboos with the help of M.S.nails.	467.34	Mtr.	14.50	6776.43
18	Providing & Laying in position burnt clay country tiles of size 10 cm. larger dia and 5 cm. smaller dia and 20 cm. length.	45.60	Sqm.	110.00	5016.29
19	Country tiles required in Nos.	8208.00	Nos.	3.00	24624.00
				Total Rs.	144532.96

Contingencies & Miscellaneous 5% of Total Rs. 7226.65
Internal Electrification 5% of Total Rs. 7226.65

Grand Total Rs. 158986.26

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Mud Plaster, Roofing - Mangalore Tiles
ABSTRACT C1

P A Rate 4605.99/Sqmt 428/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	43.00	5340.60
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
16	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
17	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
18	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
20	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
21	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
Total Rs.					107864.08

Contingencies & Miscellaneous 5% of Total Rs. 5393.20

Internal Electrification 5% of Total Rs. 5393.20

Grand Total Rs. 118650.49

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Cement Plaster, Roofing - Mangalore Tiles
ABSTRACT C 2

P A Rate 5589.42 Sqmt 519.46/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
a	For vertical posts 3m long	175.00	Nos.	25.00	4375.00
b	For half split bamboo weaving horizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
		D 2.00	Nos.	1700.00	3400.00
		D1 1.00	Nos.	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
17	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
18	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
19	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
21	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
22	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
				Total Rs.	130894.07

Contingencies & Miscellaneous 5% of Total Rs. 6544.70

Internal Electrification 5% of Total Rs. ~~6544.70~~

Grand Total Rs. 143983.48

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Mud Plaster, Roofing - Mangalore Tiles
ABSTRACT C 3

P A rate 4508.7/Sq.mts 419/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	1.82	Cum	2645.00	4824.48
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	0.23 X 0.23 Brick pillars to support the weaven split bamboo wail for superstructure and verandah	#REF!	#REF!	35.00	#REF!
10	#REF!	#REF!	#REF!	25.00	#REF!
11	#REF!	#REF!	#REF!	8.50	#REF!
12	#REF!	#REF!	#REF!	50.00	#REF!
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	#REF!	43.00	5340.60
14	#REF!	D D1	#REF! #REF!	1700.00 2000.00	#REF! #REF!
15	#REF!	#REF!	#REF!	400.00	#REF!
16	#REF!	#REF!	#REF!	35.00	#REF!

No.	Item	Qty	Unit	Rate	Amount
17	#REF!	#REF!	#REF!	24.00	#REF!
18	#REF!	#REF!	#REF!	24.00	#REF!
19	#REF!	#REF!	#REF!	29.00	#REF!
20	#REF!	#REF!	#REF!	110.00	#REF!
21	#REF!	#REF!	#REF!	8.50	#REF!
Total Rs.					#REF!

Contingencies & Miscellaneous 5% of Total Rs. #REF!

Internal Electrification 5% of Total Rs. #REF!

Grand Total Rs. #REF!

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Cement Plaster, Roofing - Mangalore Tiles
ABSTRACT C 4

P A Rate 5503.68/Sq.mts 511.49sft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
a	For vertical posts 3m long	175.00	Nos.	25.00	4375.00
10	For half split bamboo weaving horizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
17	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
18	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
19	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
21	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
22	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
				Total Rs.	128886.44

Contingencies & Miscellaneous 5% of Total Rs. 6444.32

Internal Electrification 5% of Total Rs. 6444.32

Grand Total Rs. 141775.08

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - Mangalore
Tiles

ABSTRACT C 5

P A Rate 4765.68/Sq.mts 442.9/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Prpvding PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the burnt clay tile faced Adobe wall for superstructure and	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from exposed surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
17	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64

No.	Item	Qty	Unit	Rate	Amount
18	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
19	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
20	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
Total Rs.					111604.29

Contingencies & Miscellaneous 5% of Total Rs. 5580.21

Internal Electrification 5% of Total Rs. 5580.21

Grand Total Rs. 122764.72

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Mangalore Tiles
ABSTRACT C-6

P A Rate 4768.78/Sq.mts 443.19/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Sqm	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
17	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64

No.	Item	Qty	Unit	Rate	Amount
18	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
19	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
20	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
Total Rs.					111676.37

Contingencies & Miscellaneous 5% of Total Rs. 5583.82
Internal Electrification 5% of Total Rs. 5583.82

Grand Total Rs. 122844.00

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Mangalore Tiles
ABSTRACT C-7

P A Rate 5540.25/Sqmt 505.6/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonry in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
17	Common Rafters Ordinary Timber - 8 cm Ø				

No.	Item	Qty	Unit	Rate	Amount
		118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
19	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
20	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
Total Rs.					127401.35

Contingencies & Miscellaneous 5% of Total Rs. 6370.07
Internal Electrification 5% of Total Rs. 6370.07

Grand Total Rs. 140141.49

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Mangalore Tiles
ABSTRACT C - 8

P A Rate 5090.48/Sq.mts 473.09/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position *Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
15	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
16	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
18	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29

No.	Item	Qty	Unit	Rate	Amount
19	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
				Total Rs.	119210.31

Contingencies & Miscellaneous 5% of Total Rs. 5960.52
Internal Electrification 5% of Total Rs. 5960.52

Grand Total Rs. 131131.34

5519.00

512.92

23.76

10.76

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
ABSTRACT C - 9

P A Rate 5326.77/Sq.mts 495.06/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.18	Cum	2645.00	29665.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
15	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
16	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89

No.	Item	Qty	Unit	Rate	Amount
18	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
19	Mangalore tiles required in Nos.	730.00	Nos.	8.50	6205.00
Total Rs.					124743.42

Contingencies & Miscellaneous 5% of Total Rs. 6237.17

Internal Electrification 5% of Total Rs. 6237.17

Grand Total Rs. 137217.76

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Mud Plaster, Roofing - Micro-Concrete Tiles
ABSTRACT D1

P A Rate 4633/Sq.mts 430.57/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	43.00	5340.60
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
16	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
17	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
18	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
20	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
21	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					108496.58

Contingencies & Miscellaneous 5% of Total Rs. 5424.83

Internal Electrification 5% of Total Rs. 5424.83

Grand Total Rs. 119346.24

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Cement Plaster, Roofing - Micro-Concrete Tiles
ABSTRACT D 2

P A Rate 6105.58/Sq.mt 567.43/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	96.00	3264.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	78.00	13650.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	106.00
	D1	1.00	Nos.	2000.00	3400.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
17	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
18	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
19	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
21	Providing & Laying in position Micro concrete tiles of standard size.	45.60	Sqm.	110.00	5016.29
22	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					142981.57

Contingencies & Miscellaneous 5% of Total Rs. 7149.08
Internal Electrification 5% of Total Rs. 7149.08

Grand Total Rs. 157279.73

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Mud Plaster, Roofing - Micro-Concrete Tiles
ABSTRACT D3

P A Rate 4547.24/Sqmt 422.6/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	43.00	5340.60
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
16	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
17	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
18	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
20	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
21	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					106488.94

Contingencies & Miscellaneous 5% of Total Rs. 5324.45

Internal Electrification 5% of Total Rs. 5324.45

Grand Total Rs. 117137.84

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Cement Plaster, Roofing - Micro-Concrete Tiles
ABSTRACT D 4

P A Rate 5530.66/Sqmt 514/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
a	For vertical posts 3m long	175.00	Nos.	25.00	4375.00
b	For half split babmoo weaving horizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing Cement Sand plaster , 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillars	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos.	1700.00	3400.00
	D1	1.00	Nos.	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
17	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
18	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
19	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
21	Providing & Laying in position burnt clay Mangalore tiles of standard size.	45.60	Sqm.	110.00	5016.29
22	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					129518.94

Contingencies & Miscellaneous 5% of Total Rs. 6475.95
Internal Electrification 5% of Total Rs. 6475.95

Grand Total Rs. 142470.83

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - Micro-
Concrete Tiles
ABSTRACT D 5

P A Rate 4792.72/sq.mt 445.42/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the burnt clay tile faced Adobe wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
		D 2.00	Nos.	1700.00	3400.00
		D1 1.00	Nos.	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos.	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
17	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
19	Providing & Laying in position Micro-concrete tiles of standard size.	45.60	Sqm.	110.00	5016.29
20	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					112236.79

Contingencies & Miscellaneous 5% of Total Rs. **5611.84**

Internal Electrification 5% of Total Rs. **5611.84**

Grand Total Rs. 123460.47

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Micro-Concrete Tiles
ABSTRACT D-6

P A Rate 4795.79/sq.mt 445.7/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1	2.00	Nos	1700.00	3400.00
		1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
16	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
17	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
19	Providing & Laying in position Micro-concrete tiles of standard size.	45.60	Sqm.	110.00	5016.29
20	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					112308.87

Contingencies & Miscellaneous 5% of Total Rs. 5615.44

Internal Electrification 5% of Total Rs. 5615.44

Grand Total Rs. 123539.75

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Micro-Concrete Tiles
ABSTRACT D-7

P A Rate 5467.28/Sq.mt 508.11/ Sq.ft		Qty	Unit	Rate	Amount
No.	Item	19.12	Cum	106.00	2026.30
1	Excavation				
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonry in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
17	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
18	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52
19	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64

No.	Item	Qty	Unit	Rate	Amount
20	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
21	Providing & Laying in position Micro concrete tiles of standard size.	45.60	Sqm.	110.00	5016.29
22	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
				Total Rs.	128033.85

Contingencies & Miscellaneous 5% of Total Rs. 6401.69

Internal Electrification 5% of Total Rs. 6401.69

Grand Total Rs. 140837.24

5927.49

550.88

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Micro-Concrete Tiles

ABSTRACT D- 8

P A Rate 5117.5/sq.mt 475.6/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1	D 2.00 D1 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
15	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
16	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
18	Providing & Laying in position Micro-concrete tiles of standard size.	45.60	Sqm.	110.00	5016.29
19	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					119842.81

Contingencies & Miscellaneous 5% of Total Rs. 5992.14
Internal Electrification 5% of Total Rs. 5992.14

Grand Total Rs. 131827.09
5548.28
515.6392457

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
Roofing - Micro-Concrete Tiles
ABSTRACT D - 9

P A Rate 5353.76/sq.mt 497.56/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.18	Cum	2645.00	29565.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1	D 2.00 D1 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Ordinary Timber 10 cm Ø	34.61	Mtr.	35.00	1211.35
15	Ordinary Timber Purlins - 10 cm Ø	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
16	Common Rafters Ordinary Timber - 8 cm Ø	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position ordinary timber battens of size 50mm x 40mm. of with the help of M.S.nails.	186.41	Mtr.	29.00	5405.89
18	Providing & Laying in position Micro-concrete tiles of standard size.	45.60	Sqm.	110.00	5016.29
19	Micro-concrete tiles required in Nos.	547.00	Nos.	12.50	6837.50
Total Rs.					125375.92

Contingencies & Miscellaneous 5% of Total Rs. 6268.80

Internal Electrification 5% of Total Rs. 6268.80

Grand Total Rs. 137913.51

5804.44

539.45

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Mud Plaster, Roofing - CGI Sheets

ABSTRACT E1

P A Rate 4708.33/Sqmt 437.57/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	43.00	
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
16	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins / ordinary timber	21.48	Mtr.	29.00	622.92
18	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
Total Rs.					110260.44

Contingencies & Miscellaneous 5% of Total Rs. 5513.02

Internal Electrification 5% of Total Rs. 5513.02

Grand Total Rs. 121286.49

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Mud Plaster, Roofing - CGI Sheets
ABSTRACT E 2

P A Rate 5915.22/Sqmt 549.74/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqra	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
17	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
18	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52
19	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
Total Rs.					138523.63

Contingencies & Miscellaneous 5% of Total Rs. 6926.18

Internal Electrification 5% of Total Rs. 6926.18

Grand Total Rs. 152376.00

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Mud Plaster, Roofing - CGI Sheets
ABSTRACT E3

P A Rate 4855.94/Sq.mt 451.29/ Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m				
10	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
a	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	44.00	5464.80
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
16	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins / ordinary timber	21.48	Mtr.	29.00	622.92
18	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
Total Rs.					113717.61

Contingencies & Miscellaneous 5% of Total Rs. 5685.88

Internal Electrification 5% of Total Rs. 5685.88

Grand Total Rs. 125089.37

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Cement Plaster, Roofing - CGI Sheets
ABSTRACT E4

P A Rate 5834.07/Sqmt 542.2/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m				
	D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
17	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
18	Bamboo Purlins / ordinary timber	21.48	Mtr.	29.00	622.92
19	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
Total Rs.					136623.40

Contingencies & Miscellaneous 5% of Total Rs. 6831.17
Internal Electrification 5% of Total Rs. 6831.17

Grand Total Rs. 150285.74

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - CGI Sheets
ABSTRACT E 5

P A rate ; 5083/Sq.mt 473.61/sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the burnt clay tile faced Adobe wall for superstructure and	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
15	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins / ordinary timber	21.48	Mtr.	29.00	622.92
17	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
Total Rs.					119341.25

Contingencies & Miscellaneous 5% of Total Rs. 5967.06
Internal Electrification 5% of Total Rs. 5967.06

Grand Total Rs. 131275.37

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - CGI Sheets
ABSTRACT E- 6

P A rate ; 5086.12/Sq.mt 473.89/sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	345.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
15	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins / ordinary timber	21.48	Mtr.	29.00	622.92
17	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
Total Rs.					119413.33

Contingencies & Miscellaneous 5% of Total Rs. 5970.67

Internal Electrification 5% of Total Rs. 5970.67

Grand Total Rs. 131354.66

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - CGI Sheets
ABSTRACT E-7

P A Rate 5766.07/Sqmt 535.88/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonry in staggered manner in mortor 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
17	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
Total Rs.					135030.91

Contingencies & Miscellaneous 5% of Total Rs. 6751.55

Internal Electrification 5% of Total Rs. 6751.55

Grand Total Rs. 148534.00

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - CGI Sheets
ABSTRACT E - 8

P A rate ; 5866.03/Sq.mt 501.55/sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	2645.00	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
14	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins / ordinary timber	21.48	Mtr.	29.00	622.92
16	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
				Total Rs.	126947.27

Contingencies & Miscellaneous 5% of Total Rs. 6347.36

Internal Electrification 5% of Total Rs. 6347.36

Grand Total Rs. 139642.00

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
Roofing - CGI Sheets
ABSTRACT E - 9

P A rate ; 5657.16/Sq.mt 525.76/sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	2645.00	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.18	Cum	2645.00	29565.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
	D2				
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
14	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins / ordinary timber	21.48	Mtr.	29.00	622.92
16	Providing & Fixing in position corrugated galvanised iron sheets with the help of G.I.J bolts	45.60	Sqm.	594.47	27109.38
				Total Rs.	132480.38

Contingencies & Miscellaneous 5% of Total Rs. 6624.02
Internal Electrification 5% of Total Rs. 6624.02

Grand Total Rs. 145728.42

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Mud Plaster, Roofing - Bamboo Crete in Slope
ABSTRACT F1

P A Rate 4568.2/Sqmt 424.55/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Providing PCC 1:3:6 for IPS flooring	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	43.00	5340.60
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D2	1.00	Nos	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
16	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins	21.48	Mtr.	24.00	515.52

18	Common Rafters	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire	161.11	Mtr.	14.50	2336.10
20	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm	45.60	Sqm.	300.00	13680.78
Total Rs.					107253.78

Contingencies & Miscellaneous 5% of Total Rs. 5362.69

Internal Electrification 5% of Total Rs. 5362.69

Grand Total Rs. 117979.16

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Cement Plaster, Roofing - Bamboo Crete in Slope
ABSTRACT F2

P A Rate 5477.95/sm 509.1/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
13	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
17	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
18	Bamboo Purlins	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
19	Common Rafters	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire etc. complete.	161.11	Mtr.	14.50	2336.10
21	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm thick.	45.60	Sqm.	300.00	13680.78
Total Rs.					128283.77

Contingencies & Miscellaneous 5% of Total Rs. 6414.19

Internal Electrification 5% of Total Rs. 6414.19

Grand Total Rs. 141112.15

23.76
10.76

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Mud Plaster, Roofing
- Bamboo Crete in Slope
ABSTRACT F3

P A Rate 6072.98/Sq.mt 564.4/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Providing PCC 1:3:6 for IPS flooring	10.37	Cum	3934.00	40787.71
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
a	For vertical posts 3m long	175.00	Nos.	25.00	4375.00
b	For half split bamboo weaving horizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	44.00	5464.80
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D2	1.00	Nos	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
16	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins	21.48	Mtr.	24.00	515.52

18	Common Rafters	118.86	Mtr.	24.00	2852.64
19	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire	161.11	Mtr.	14.50	2336.10
20	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm	45.60	Sqm.	300.00	13680.78
Total Rs.					142218.22

Contingencies & Miscellaneous 5% of Total Rs. 7110.91
Internal Electrification 5% of Total Rs. 7110.91

Grand Total Rs. 156440.04

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Cement Plaster, Roofing
- Bamboo Crete in Slope

ABSTRACT F4

P A Rate 7644.63/Sq.mt 653.63/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	Kind class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	3934.00	40787.71
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m				
a	For vertical posts 3m long	34.00	Nos.	35.00	1190.00
b	For half split bamboo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
13	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
17	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
18	Bamboo Purlins	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
19	Common Rafters	118.86	Mtr.	24.00	2852.64
20	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire etc. complete.	161.11	Mtr.	14.50	2336.10
21	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm thick.	45.60	Sqm.	300.00	13680.78
Total Rs.					165124.01

Contingencies & Miscellaneous 5% of Total Rs. 8256.20

Internal Electrification 5% of Total Rs. 8256.20

Grand Total Rs. 181636.41

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - Bamboo
Crete in Slope
ABSTRACT F5

P A Rate 4739.65/Sq.mts 440.48/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Providing PCC 1:3:6 for IPS flooring	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the burnt clay tile faced Adobe wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins	21.48	Mtr.	24.00	515.52

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17	Common Rafters	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire	161.11	Mtr.	14.50	2336.10
19	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm	45.60	Sqm.	300.00	13680.78
Total Rs.					110993.99

Contingencies & Miscellaneous 5% of Total Rs. 5549.70

Internal Electrification 5% of Total Rs. 5549.70

Grand Total Rs. 122093.39

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Bamboo Crete in Slope

ABSTRACT F- 6

P A Rate 4742.7/Sq.mts 440.77/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Providing PCC 1:3:6 for IPS flooring	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins	21.48	Mtr.	24.00	515.52

17	Common Rafters	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire	161.11	Mtr.	14.50	2336.10
19	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm	45.60	Sqm.	300.00	13680.78
Total Rs.					111066.06

Contingencies & Miscellaneous 5% of Total Rs. 5553.30
Internal Electrification 5% of Total Rs. 5553.30

Grand Total Rs. 122172.67

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Bamboo Crete in Slope
ABSTRACT F-7

P A Rate 5416.31/sm 503.37.8/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonary in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
17	Common Rafters	118.86	Mtr.	24.00	2852.64
18	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire etc. complete.	161.11	Mtr.	14.50	2336.10
19	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm thick.	45.60	Sqm.	300.00	13680.78
Total Rs.					126791.05

Contingencies & Miscellaneous 5% of Total Rs. 6339.55
Internal Electrification 5% of Total Rs. 6339.55

Grand Total Rs. 139470.15

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Bamboo Crete in Slope
ABSTRACT F- 8

P A Rate 5064.44/Sq.mts 470.67/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Providing PCC 1:3:6 for IPS flooring	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins	21.48	Mtr.	24.00	515.52

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16	Common Rafters	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire	161.11	Mtr.	14.50	2336.10
18	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm	45.60	Sqm.	300.00	13680.78
Total Rs.					118600.01

Contingencies & Miscellaneous 5% of Total Rs. 5930.00

Internal Electrification 5% of Total Rs. 5930.00

Grand Total Rs. 130460.01

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
Roofing - Bamboo Crete in Slope
ABSTRACT F- 9

P A Rate 5300.7/Sq.mts 492.62/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Providing PCC 1:3:6 for IPS flooring	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.18	Cum	2645.00	29565.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Bamboo 8cm Ø	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins	21.48	Mtr.	24.00	515.52

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16	Common Rafters	118.86	Mtr.	24.00	2852.64
17	Providing & Fixing in position half split bamboo battens above the common rafters with the help of binding wire	161.11	Mtr.	14.50	2336.10
18	Providing bamboo crete in slope by weaving in position well treated split bamboo with two layers of chicken mess and cement-sand plaster 1:4, 10mm	45.60	Sqm.	300.00	13680.78
Total Rs.					124133.12

Contingencies & Miscellaneous 5% of Total Rs. 6206.66

Internal Electrification 5% of Total Rs. 6206.66

Grand Total Rs. 136546.43

Proposed Construction of House for BMTPC in village MAHADEVAN
alling - Brick pillars with split bamboo filler walls - Mud Plaster, Roofing - Corrugated Bamboo Shee
ABSTRACT G1

P A Rate 6081.74/Sqmt 565.22 Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
a	For vertical posts 3m long	175.00	Nos.	25.00	4375.00
b	For half split babmoo weaving lhorizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	43.00	5340.60
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D2	1.00	Nos	2000.00	2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
16	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52
18	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					142423.35

Contingencies & Miscellaneous 5% of Total Rs. 7121.17

Internal Electrification 5% of Total Rs. 7121.17

Grand Total Rs. 156665.68

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with split bamboo filler walls - Cement Plaster, Roofing - Corrugated Bamboo
Sheets

ABSTRACT G 2

P A Rate 6205.5/Sqmt 576.52/Sqft		Qty	Unit	Rate	Amount
No.	Item	19.12	Cum	106.00	2026.30
1	Excavation				
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wail for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
a	For vertical posts 3m long	175.00	Nos.	25.00	4375.00
b	For half split bamboo weaving horizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	43.00	5340.60
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	125.00	2898.00

No.	Item	Qty	Unit	Rate
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D2	2.00	Nos	1700.00
		1.00	Nos	2000.00
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00
17	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00
18	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00
19	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00
				Total Rs.

Contingencies & Miscellaneous 5% of Total Rs.
Internal Electrification 5% of Total Rs.

Grand Total Rs.

Proposed Construction of House for BMTPC in village MAHADEVAN
alling - Bamboo pillars with split bamboo filler walls - Mud Plaster, Roofing - Corrugated Bamboo Shee
ABSTRACT G 3

P A rate : 6001.31/sq.mts 557.74/sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m a For vertical posts 3m long	34.00	Nos.	35.00	1190.00
10	For half split babmoo weaving horizontally 6m long	175.00	Nos.	25.00	4375.00
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing MUD plaster 20mm thick to both the surfaces	124.20	Sqm	44.00	5464.80
14	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
15	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
16	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
17	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52
18	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					140539.91

Contingencies & Miscellaneous 5% of Total Rs. 7027.00

Internal Electrification 5% of Total Rs. 7027.00

Grand Total Rs. 154593.90

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Bamboo pillars with split bamboo filler walls - Cement Plaster, Roofing - Corrugated Bamboo
Sheets

ABSTRACT G4

P A rate 6979.43/sq.mts 648.64/sq.mts		Qty	Unit	Rate	Amount
No.	Item	19.12	Cum	106.00	2026.30
1	Excavation				
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	Chemically treated Bamboo pillars, composite pillar consisting of 5 bamboos for corner pillars and of 3 bamboos for intermediate pillars. 8 Cm. Ø	37.00	Nos.	45.00	1665.00
10	Chemically treated Bamboo of Average dia 0.045m	34.00	Nos.	35.00	1190.00
10	For vertical posts 3m long	175.00	Nos.	25.00	4375.00
10	For half split bamboo weaving horizontally 6m long				
11	Providing Single layer of chicken mesh over bamboo weaved surface for outer and inner surface	124.2	Sqm	8.50	1055.70
12	Bamboo weaving	62.1	Sqm	50.00	3105.00
13	Providing cement sand plaster 1:4, 20mm thick to both the surfaces	124.20	Sqm	212.00	26330.40
14	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	23.18	Sqm	88.00	2040.19
15	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
		1.00	Nos	2000.00	2000.00

D2

No.	Item	Qty	Unit	Rate	Amount
16	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
17	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
18	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52
19	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					163445.70

Contingencies & Miscellaneous 5% of Total Rs. 8172.29
Internal Electrification 5% of Total Rs. 8172.29

Grand Total Rs. 179790.27

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - Corrugated
Bamboo Sheets
ABSTRACT G5

P A Rate 6741.45/Sq.mts 580/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the adobe wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
16	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52
17	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					146163.55

Contingencies & Miscellaneous 5% of Total Rs. 7308.18
Internal Electrification 5% of Total Rs. 7308.18

Grand Total Rs. 160779.91

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Corrugated Bamboo Sheets

ABSTRACT G-6

P A Rate 6244.53/Sq.mts 580.34/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35

No.	Item	Qty	Unit	Rate	Amount
16	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52
17	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					146235.63

Contingencies & Miscellaneous 5% of Total Rs. 7311.78
Internal Electrification 5% of Total Rs. 7311.78

Grand Total Rs. 160859.19

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Corrugated Bamboo
Sheets
ABSTRACT G-7

P A Rate 6916/Sqmt 642.75/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.76
10	Half brick thick brick masonry in staggered manner in mortor 1:6 with reinforced coping 10 cm. thick after, 1 mtr. in height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
15	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
16	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52
17	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					161960.62

Contingencies & Miscellaneous 5% of Total Rs. 8098.03
Internal Electrification 5% of Total Rs. 8098.03

Grand Total Rs. 178156.68

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Corrugated Bamboo
Sheets

ABSTRACT G - 8

P A Rate 6566.25/Sq.mts 610.24/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
16	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					153769.58

Contingencies & Miscellaneous 5% of Total Rs. 7688.48

Internal Electrification 5% of Total Rs. 7688.48

Grand Total Rs. 169146.53

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster, Roofing -
Corrugated Bamboo Sheets

ABSTRACT G - 9

P A Rate 6802.32/Sq.mts 632.2/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.18	Cum	2645.00	29565.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Principal rafters Bamboo 8cm Ø / ordinary timber of size 8 cm. x 10 cm.	34.61	Mtr.	35.00	1211.35
15	Bamboo Purlins / ordinary timber	21.48	Mtr.	24.00	515.52

No.	Item	Qty	Unit	Rate	Amount
16	Providing & Fixing in position corrugated Bamboo Mat ply sheets with the help of G.I.J bolts	45.60	Sqm.	1185.00	54039.08
Total Rs.					159302.69

Contingencies & Miscellaneous 5% of Total Rs. 7965.13

Internal Electrification 5% of Total Rs. 7965.13

Grand Total Rs. 175232.95

7375.12

685.42

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing - Conical Tiles Arch
ABSTRACT H 5

P A Rate 5902,21/Sq.mts 548.53/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23cm X 0.23cm Brick pillars to support the burnt clay tile faced adobe wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
		1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	M.S.Reinforcement (1.83 x 100 = 183 Kgs.)	183.00	Kgs.	58.00	10614.00

No.	Item	Qty	Unit	Rate	Amount
17	Conical tiled arch roof of 2.4 mtrs span and 0.6 mtr rise of riverse catenary shape and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	810.00	21565.44
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					138219.07

Contingencies & Miscellaneous 5% of Total Rs. 6910.95

Internal Electrification 5% of Total Rs. 6910.95

Grand Total Rs. 152040.9823.76
92.01

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Conical Tiles Arch
ABSTRACT H- 6

P A Rate 5905.29/Sq.mts 548.82/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	M.S.Reinforcement (1.83 x 100 = 183 Kgs.)	183.00	Kgs.	58.00	10614.00

No.	Item	Qty	Unit	Rate	Amount
17	Conical tiled arch roof of 2.4 mtrs span and 0.6 mtr rise of riverse catenary shape and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	810.00	21565.44
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					138291.15

Contingencies & Miscellaneous 5% of Total Rs. 6914.56

Internal Electrification 5% of Total Rs. 6914.56

Grand Total Rs. 152120.26

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Conical Tiles Arch
ABSTRACT H-7

P A Rate 6623.52/Sqmt 611.22/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	0	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonry in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	M.S.Reinforcement (1.83 x 100 = 183 Kgs.)	183.00	Kgs	58.00	10614.00
17	Conical tiled arch roof of 2.4 mtrs span and 0.6 mtr rise of riverse catenary shape and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm	810.00	21565.44

No.	Item	Qty	Unit	Rate	Amount
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					154016.13

Contingencies & Miscellaneous 5% of Total Rs. 7700.81
Internal Electrification 5% of Total Rs. 7700.81

Grand Total Rs. 169417.75

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Conical Tiles Arch
ABSTRACT H - 8

P A Rate 6227/Sq.mts 578.72/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IIInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	M.S.Reinforcement (1.83 x 100 = 183 Kgs.)	183.00	Kgs.	58.00	10614.00

No.	Item	Qty	Unit	Rate	Amount
16	Conical tiled arch roof of 2.4 mtrs span and 0.6 mtr rise of reverse catenary shape and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	810.00	21565.44
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					145825.09

Contingencies & Miscellaneous 5% of Total Rs. 7291.25

Internal Electrification 5% of Total Rs. 7291.25

Grand Total Rs. 160407.60

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
Roofing - Conical Tiles Arch
ABSTRACT H - 9

P A Rate 6646.73/Sq.mts 575.22/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	11.18	Cum	2645.00	29565.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	M.S.Reinforcement (1.83 x 100 = 183 Kgs.)	183.00	Kgs.	58.00	10614.00

No.	Item	Qty	Unit	Rate	Amount
16	Conical tiled arch roof of 2.4 mtrs span and 0.6 mtr rise of riverse catenary shape and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	810.00	21565.44
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					151358.20

Contingencies & Miscellaneous 5% of Total Rs. 7567.91

Internal Electrification 5% of Total Rs. 7567.91

Grand Total Rs. 166494.02

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with Burnt Tile faced Adobe filler walls - Mud Plaster, Roofing
- Conical Tiles Filler slab slope
ABSTRACT J5

P A Rate 6684.33/Sq.mts 621.22/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the weaven split bamboo wall for superstructure and verandah	1.33	Cum	2755.00	3672.64
10	Providing Burnt clay tile faced Adobe wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside	11.18	Cum	1256.00	14039.57
11	Cement pointing in CM 1:3 to the tile faced abode wall from outside	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

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No.	Item	Qty	Unit	Rate	Amount
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	Conical tiled filler slab of 2.4 mtrs span and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	1150.00	30617.60
17	M.S.Reinforcement	342.72	Kgs.	58.00	19877.76
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					156534.99

Contingencies & Miscellaneous 5% of Total Rs. 7826.75
Internal Electrification 5% of Total Rs. 7826.75

Grand Total Rs. 172188.49
673.51 7246.99

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Conical Tiles Filler slab slope

ABSTRACT J - 6

P A Rate 6687.41/Sq.mts 621.5 /Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.22	Cum	1560.00	346.60
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	11.18	Cum	1560.00	17437.68
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	40.32	Sqm	52.00	2096.64
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	62.10	Sqm	43.00	2670.30
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	Conical tiled filler slab of 2.4 mtrs span and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	1150.00	30617.60
17	M.S.Reinforcement	342.72	Kgs.	58.00	19877.76
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					156607.07

Contingencies & Miscellaneous 5% of Total Rs. 7830.35

Internal Electrification 5% of Total Rs. 7830.35

Grand Total Rs. 172267.77

673.51

7246.99

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster,
Roofing - Conical Tiles Filler slab slope
ABSTRACT J-7

P A Rate 7358.9/Sqmt 683.91/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	0	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	1.56	Cum	2755.00	4284.74
10	Half brick thick brick masonary in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	57.06	Sqm	330.00	18829.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	114.12	Sqm	112.00	12781.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	21.25	Sqm	112.00	2380.22
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	Conical tiled filler slab of 2.4 mtrs span and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	1150.00	30617.60
17	M.S.Reinforcement	342.72	Kgs.	58.00	19877.76
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					172332.05

Contingencies & Miscellaneous 5% of Total Rs. 8616.60
Internal Electrification 5% of Total Rs. 8616.60

Grand Total Rs. 189565.26

Proposed Construction of House for BMTPC in village MAHADEVAN

Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Conical Tiles Filler slab slope

ABSTRACT J - 8

P A Rate 7009.12 /Sq.mts 651.4/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	11.18	Cum	2150.00	24032.70
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	Conical tiled filler slab of 2.4 mtrs span and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	1150.00	30617.60
16	M.S.Reinforcement	342.72	Kgs.	58.00	19877.76
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
				Total Rs.	164141.01

Contingencies & Miscellaneous 5% of Total Rs. 8207.05
 Internal Electrification 5% of Total Rs. 8207.05

Grand Total Rs. 180555.11

Proposed Construction of House for BMTPC in village MAHADEVAN

Roofing - Conical Tiles Filler slab slope

ABSTRACT J-9

P A Rate 7245.4 /Sq.mts 673.36/Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.32
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	11nd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.22	Cum	2645.00	587.67
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work	11.18	Cum	2645.00	29565.81
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	62.10	Sqm	88.00	5464.80
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
	D2				
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00

No.	Item	Qty	Unit	Rate	Amount
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	Conical tiled filler slab of 2.4 mtrs span and 2 coats of cement plaster with china tile mosaic in cement slurry on the top.	26.62	Sqm.	1150.00	30617.60
16	M.S.Reinforcement	342.72	Kgs.	58.00	19877.76
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					169674.12

Contingencies & Miscellaneous 5% of Total Rs. 8483.71

Internal Electrification 5% of Total Rs. 8483.71

Grand Total Rs. 186641.54

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Reinforced brick concrete
ABSTRACT L- 6

P A Rate 6521.24/Sq.mts 606.06/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IIInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.29	Cum	1560.00	453.88
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	15.48	Cum	1560.00	24154.42
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	52.8	Sqm	52.00	2745.60
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	83.16	Sqm	43.00	3575.88
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels, size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	Reinforced brick concrete using best quality red burnt bricks of size 20cm. x 10cm. x 8cm with required M.S.reinforcement at specified distances	3.69	Cum	4000.00	14770.04

No.	Item	Qty	Unit	Rate	Amount
17	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					152715.50

Contingencies & Miscellaneous 5% of Total Rs. 7635.78

Internal Electrification 5% of Total Rs. 7635.78

Grand Total Rs. 167987.06

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster, Roofing - Reinforced brick concrete
ABSTRACT L-7

P A Rate 7384.34/Sqmt 686.27/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	0	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	2.04	Cum	2755.00	5610.97
10	Half brick thick brick masonary in staggered manner in mortor 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	76.56	Sqm	330.00	25264.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	153.12	Sqm	112.00	17149.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	27.83	Sqm	112.00	3116.96
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	Reinforced brick concrete using best quality red burnt bricks of size 20cm. x 10cm. x 8cm with required M.S.reinforcement at specified distances	3.69	Cum	4000.00	14770.04
17	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20

No.	Item	Qty	Unit	Rate	Amount
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					172927.90

Contingencies & Miscellaneous 5% of Total Rs. 8646.39

Internal Electrification 5% of Total Rs. 8646.39

Grand Total Rs. 190220.69

8005.92

744.04

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster, Roofing - Reinforced brick concrete
ABSTRACT L8

P A Rate 6967.37/Sq.mts 647.52/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.29	Cum	2645.00	769.56
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	15.48	Cum	2150.00	33289.74
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	83.16	Sqm	88.00	7318.08
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	Reinforced brick concrete using best quality red burnt bricks of size 20cm. x 10cm. x 8cm with required M.S.reinforcement at specified distances	3.69	Cum	4000.00	14770.04

No.	Item	Qty	Unit	Rate	Amount
16	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					163163.11

Contingencies & Miscellaneous 5% of Total Rs. 8158.16

Internal Electrification 5% of Total Rs. 8158.16

Grand Total Rs. 179479.42

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
Roofing - Reinforced brick concrete
ABSTRACT L - 9

P A Rate 7294.65/Sq.mts 677.94/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	Ilnd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.29	Cum	2645.00	769.56
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	15.48	Cum	2645.00	40954.12
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	83.16	Sqm	88.00	7318.08
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	Reinforced brick concrete using best quality red burnt bricks of size 20cm. x 10cm. x 8cm with required M.S.reinforcement at specified distances	3.69	Cum	4000.00	14770.04

No.	Item	Qty	Unit	Rate	Amount
16	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					170827.49

Contingencies & Miscellaneous 5% of Total Rs. 8541.37

Internal Electrification 5% of Total Rs. 8541.37

Grand Total Rs. 187910.24

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Stabilised Mud Block walls - Mud Plaster, Roofing - Reinforced Cement concrete in situ
ABSTRACT M - 6

P A Rate 6671.6/Sq.mts 620/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IIInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Stabilised mud block pillars to support the roof on the verandah	0.29	Cum	1560.00	453.88
10	Providing stabilised mud block wall in mud mortar and cement pointing from expose surface and stabilised mud plaster from inside.	15.48	Cum	1560.00	24154.42
11	Cement pointing in CM 1:3 to the stabilised mud block wall from outside.	52.8	Sqm	52.00	2745.60
12	Providing stabilised MUD plaster 15mm thick from inside the surfaces	83.16	Sqm	43.00	3575.88
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	Reinforced cement concrete M-20 grade, slab thickness 10 cm supported by M.S.plate / water proof ply centering with required M.S.reinforcement at specified distances as per the design.	3.69	Cum	4954.00	18292.69

No.	Item	Qty	Unit	Rate	Amount
17	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					156238.16

Contingencies & Miscellaneous 5% of Total Rs. 7811.91

Internal Electrification 5% of Total Rs. 7811.91

Grand Total Rs. 171861.98

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Brick pillars with half brick thick walls - Cement Plaster,
Roofing - Reinforced Cement concrete in situ
ABSTRACT M-7

P A Rate 7534.7/Sqmt 700.25/Sqft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	0	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Brick pillars to support the half brick thick wall for superstructure and verandah.	2.04	Cum	2755.00	5610.97
10	Half brick thick brick masonry in staggered manner in mortar 1:6 with reinforced coping 10 cm. thick after, 1 mtr. In height.	76.56	Sqm	330.00	25264.80
11	Providing cement sand plaster 1:4, 12mm thick to both the surfaces	153.12	Sqm	112.00	17149.44
12	Providing cement sand plaster 1:4, 12mm thick to the exposed brick work, Pillers	27.83	Sqm	112.00	3116.96
13	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m	2.00	Nos	1700.00	3400.00
	D1	1.00	Nos	2000.00	2000.00
14	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
15	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
16	Reinforced cement concrete M-20 grade, slab thickness 10 cm supported by M.S.plate / water proof ply centering with required M.S.reinforcement at specified distances as per the design.	3.69	Cum	4954.00	18292.69
17	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20

No.	Item	Qty	Unit	Rate	Amount
18	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					176450.55

Contingencies & Miscellaneous 5% of Total Rs. 8822.53
Internal Electrification 5% of Total Rs. 8822.53

Grand Total Rs. 194095.61

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - Rat Trap Bond 23 cm. thick Brick Wall - Mud Plaster,
Roofing - Reinforced Cement concrete in situ
ABSTRACT M-8

P A Rate 7117.8/Sq.mts 661.5/ Sq.ft

No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.29	Cum	2645.00	769.56
10	Providing 230 mm thick rat trap bond in cement mortar 1:6 brick wall, exposed brick work	15.48	Cum	2150.00	33289.74
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	83.16	Sqm	88.00	7318.08
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	Reinforced cement concrete M-20 grade, slab thickness 10 cm supported by M.S.plate / water proof ply centering with required M.S.reinforcement at specified distances as per the design.	3.69	Cum	4954.00	18292.69

No.	Item	Qty	Unit	Rate	Amount
16	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					166685.76

Contingencies & Miscellaneous 5% of Total Rs. 8334.29
Internal Electrification 5% of Total Rs. 8334.29

Grand Total Rs. 183354.34

Proposed Construction of House for BMTPC in village MAHADEVAN
Walling - BB masonry 23 cm. thk. CM 1:6 exposed bk work - inside cement plaster,
Roofing - Reinforced Cement concrete in situ
ABSTRACT M - 9

P A Rate 7445/Sq.mts 691,9/ Sq.ft

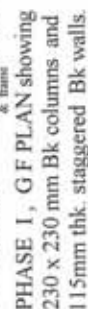
No.	Item	Qty	Unit	Rate	Amount
1	Excavation	19.12	Cum	106.00	2026.30
2	Providing PCC 1:3:6 for the spread footing brick foundation	1.824	Cum	3934.00	7175.62
3	IInd class BB Masonary for Foundation, plinth & base wall	11.51	Cum	2645.00	30440.78
4	Half brick thick wall for leach pits of W/C & Bath.	9.90	Sqm	380.00	3762.00
5	Damp proofing course of 1:1.5:3 RCC	0.74	Cum	4861.00	3600.06
6	Murum filling in plinth	10.37	Cum	380.00	3939.84
7	Providing PCC 1:3:6 for IPS flooring	1.89	Cum	3934.00	7424.87
8	Providing IPS Flooring CM 1:6	23.59	Sqm	125.00	2949.00
9	0.23 X 0.23 Burnt Brick pillars in cement mortar to support the roof on the verandah	0.29	Cum	2645.00	769.56
10	Providing burnt brick masonry 23 cm. thick in cement mortar 1:6 exposed brick work .	15.48	Cum	2645.00	40954.12
11	Providing cement plaster 1:4, 12mm thick from inside the surfaces.	83.16	Sqm	88.00	7318.08
12	Providing & Fixing in position Doors of ordinary timber frame and bamboo panels size 0.90 X 2.10m D1 D2	2.00 1.00	Nos Nos	1700.00 2000.00	3400.00 2000.00
13	Providing & Fixing in position slit Windows as per the design of size 0.9 X 1.2 m	3.00	Nos	400.00	1200.00
14	Providing RCC lintels 15 cm thick and 23 cm wide with 23 cm overhang cantilever.	1.83	Cum	4954.00	9067.65
15	Reinforced cement concrete M-20 grade, slab thickness 10 cm supported by M.S.plate / water proof ply centering with required M.S.reinforcement at specified distances as per the design.	3.69	Cum	4954.00	18292.69

No.	Item	Qty	Unit	Rate	Amount
16	M.S.Reinforcement	404.40	Kgs.	58.00	23455.20
17	Providing Patta Plaster to the lintels	173.01	Mtr.	38.00	6574.38
Total Rs.					174350.15

Contingencies & Miscellaneous 5% of Total Rs. 8717.51

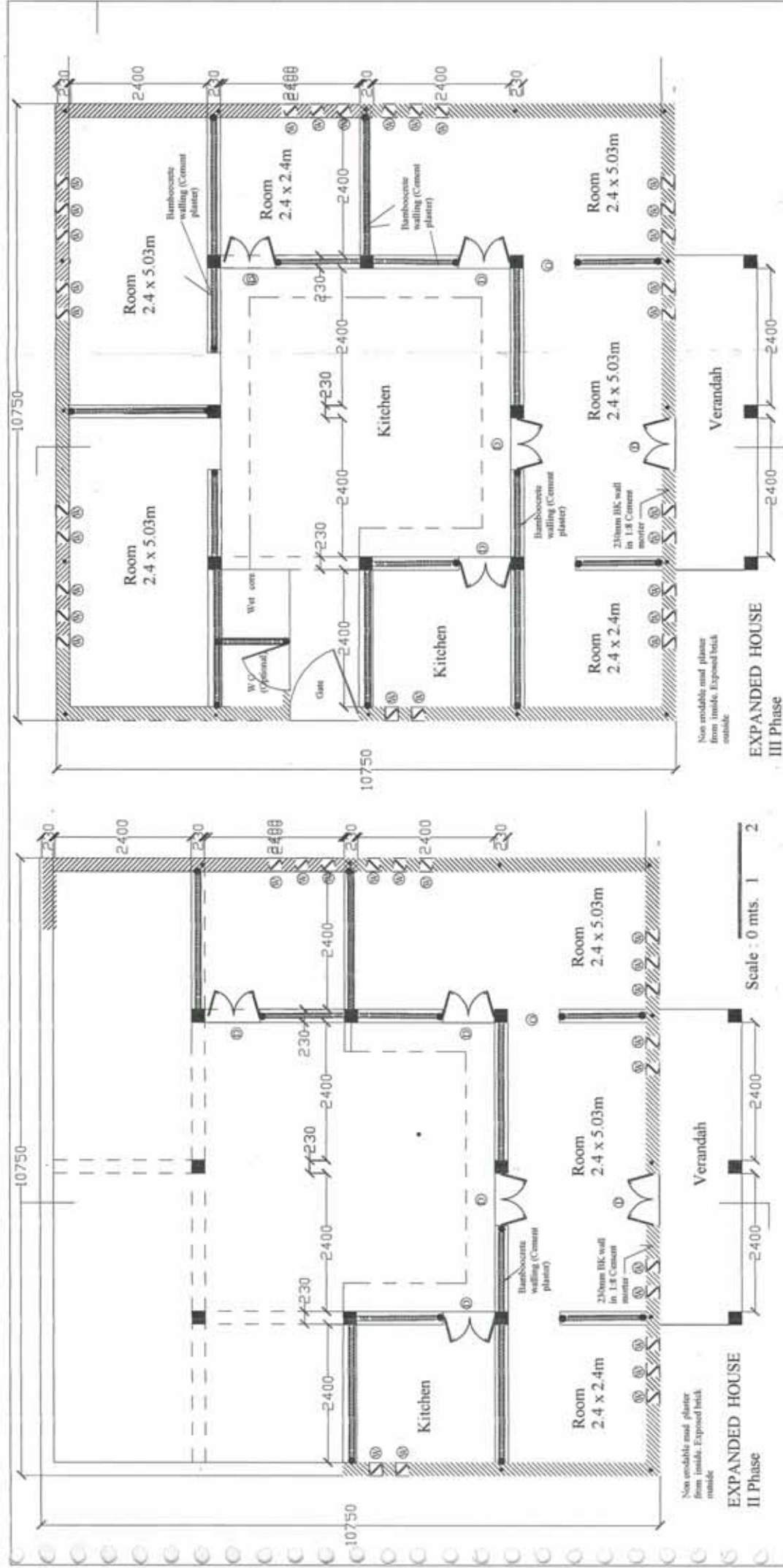
Internal Electrification 5% of Total Rs. 8717.51

Grand Total Rs. 191785.16



Scale: 0 mts 1 2

Drawg. no: BMTPC/VS/01 June 2010



HOUSE / STRUCTURE & HOUSE HOLD SURVEY

(Structure as identified on the Existing village map will be unit of Survey)

SOCIO- ECONOMIC PROFILE

01) GENERAL

Form Number ----- Name of Enumerator-----

Structure Number ----- Use -----

Number of Families ----- Head of Household-----

02) FAMILY ONE (Joint Family) Number of persons

Age group up to 04, 05 to 08, 09 to 16, 17 to 22, 23 to 58, 58 + , Literate

No. of males

No. of Females

Education level School dropouts, Primary , Secondary, General Collage, Technical,

Male

Female

Area occupied (Sq.mts): House----- Animal Shed----- Open Court-----

Land ownership Area in Bighas-----Location (distance from house, Kms) -----

Occupation Agriculture, Dairy Farming, Shop, Others, Employed worker, Work place (Kms)

Male

Female

02.1) FAMILY TWO (Where applicable – for multi family) Number of persons

Age group up to 04, 05 to 08, 09 to 16, 17 to 22, 23 to 58, 58 + , Literate

No. of males

No. of Females

Education level School dropouts, Primary , Secondary, General Collage, Technical,

Male

Female

Area occupied (Sq.mts): House-----Animal Shed----- Open Court-----Separate store----

Occupation Agriculture, Dairy Farming, Shop, Others, Employed worker, Work place (Kms)

Male

Female

02.2) FAMILY THREE (Where applicable- for multi family) Number of persons

Age group up to 04, 05 to 08, 09 to 16, 17 to 22, 23 to 58, 58 + , Literate

No. of males

No. of Females

Education level School dropouts, Primary , Secondary, General Collage, Technical,

Male

Female

Area occupied (Sq.mts): House-----Animal Shed-----Open Court-----separate store-

-Occupation Agriculture, Dairy Farming, Shop, Others, Employed worker, Workplace

Male

Female

3) Transport Service : Bus stop (distance Km :) Service Frequency:
 Rly. Station : Nearest town (Amethi Km)
 District Hq. (Sultanpur Km)
 Ownership of Tractors : No.
 Bullock Carts
 Two Wheelers
 Bicycles
 Truck
 Principal mode of transport to other towns/villages

4) Building Condition : Materials Used

Structure no.	Walling	Roofing	Door/Windows	Foundation	Condition*

* Kachha (Need replacement)/ Fair (Need improvement)/ Good . Also specify improvement needs in each case

5) Special features of House

Attach an Illustrated drawing showing House design with approximate dimensions and photographs. Mark the location of photograph on plan.

6) Services

Water Supply : Well (Owned / Community) Distance from House-----

Hand pump (Owned / Community) Distance from House-----

Toilet : Individual / Community

Type : Single or double Pit latrine / Septic Tank / Any other

Bio Gas generation Plant Use : Gas for cooking / Electricity generation

Electrical Connection : metered / unauthorized

Solid waste disposal : Is solid waste generated substantially ? yes / No

If yes disposal method

7) Domestic Animals

Type Buffaloes Cows Sheep Dogs Horse Any other

Nos.

Is there a separate Animal Shed ? YES / No Area of Animal shed -----Sq.mt

If no Animal Shed Are Animals tied in open space ? YES / No

Animal Open space – Public / your own

VILLAGE LEVEL SURVEY

- 1) **Total Station Survey of Village :** To indicate built up area of all structures, Major trees, roads, Elect.lines, wells, Hand Pumps, Village & individual ownership etc. This will serve as the Base Map and Reference point for all field Survey .
- 2) **Existing Land use :** to show present use of Land and Buildings
- 3) **Infrastructure Survey:** Locate water supply storage & distribution system,] Toilets and disposal system, Electricity linkages to House, street poles, sub-station etc. Roads and its' Specification and its' physical condition. Any other Infrastructure. Land Telephone, Number of Cell phones
- 4) **Amenities & facilities :** **Educational** facilities within village and its' environs up to College level –

Facility	Distance in Km from village
Angan Wadi	
Pre Primary School	
Primary School	
Secondary School	
College	
Community Hall	
Panchayat Bldg	
Health Center	
Hospital	
- 5) **Transport Service** : Bus stop (distance Km :) Service Frequency:
 Rly. Station : Nearest town (Amethi Km)
 District Hq. (Sultanpur Km)
 Ownership of Tractors : No.
 Bullock Carts
 Two Wheelers
 Bicycles
 Truck
 Principal mode of transport to other towns/villages
- 6) **Building Condition** : **Materials Used**

Structure no.	Walling	Roofing	Door/Widows	Foundation	Condition*

* Kachha (Need replacement)/ Fair (Need improvement)/ Good . Also specify improvement needs in each case

7) Locally available materials : **Approximate cost in Rs. Per Unit**
 Village Amethi Sultanpur

Bricks
 Sand
 Wood
 Cement
 Lime
 Steel

8) Locally available skills : **Labor rate Rs. Per day (AMETHI)**

Mason
 Plumber
 Carpenter
 Helper

Earthen Tile / pot maker

9) Construction practices in village and approximate plinth area rate of construction of a rural house

10) Domestic animals

Low cost water filter



Introduction

In collaboration with TATA Consultancy Services Ltd., Pune CSV has introduced a low cost water filter made from rice husk ash for villagers. The filter is very cheap and can be fabricated at the village level by the women folk, with very little investment. The filter is very hygienic and kills about 98% bacterial in the water and keeps it free from fluorides and arsenic. Village women have now come out with a Programme of constructing nearly 500 filters and they have already started working on the same...

Filter Description: The filter developed by TRDDC uses rice husk ash, pebbles and a binder for the fabrication of the filter bed. Various types of containers can be used for housing the bed. These can be plastic buckets, plastic pipes or even earthen pots. The choice depends upon requirement and affordability. The filter can be produced either in a factory setting by a village entrepreneur or can be made in a 'do-it-yourself' mode.

Characteristics of Filtered Water:

The TRDDC filters have been tested with water from three different sources (with widely varying levels of contamination) for pH, turbidity and bacterial count. In all cases, the filtered water from the TRDDC filters was found to be equivalent to or better than the tap water supplied by the public water-work departments in cities. The turbidity of canal water decreased from 12 to 0.5 (NTU) and bacterial trapping was generally 93-99%. A filtration rate of approximately 2-3 liter/hour is possible in normal sizes. However the rates can vary depending upon design and size.

Filter Life:

The life of the filter bed material varies from 6 to 8 months depending on the type of influent. Once the filtration rate decreases to less than the desired rates, the filtered material can be discarded and fresh material can be filled into the same container for reuse.

Fabrication of Filter Element : The fabrication of the filter bed (cartridge comprises of three main process:

- Preparation of treatment of rice husk ash
- Container preparation
- Casting of filter bed

Each process of the fabrication procedure is discussed in detail.

Material

Rice Husk: Rice husk can be procured from near by rice mills.

Rice Husk Ash: Rice husk ash can be collected from brick kilns where rice husk is used as fuel. The rice husk ash should be collected from the inner section of the kiln. Make sure that the ash you are collecting is pure and is of rice husk only. The other sources are boiler ash (where rice husk is used as fuel for boiler) and heap burning of rice husk.

Pebbles: Pebbles can be collected from riverbanks or obtained from construction material supplier. The size should be - 10mm.

Granite stone (aggregates), Cement and Sand: This material can be obtained from the building material vendor.

Tools and Accessories : The tools and accessories required for the preparation and pre-treatment of RHA are listed in Table.

Stainless Steel Mesh : Stainless steel mesh of 1mm, 3mm, 5mm and 10mm is required for fabricating Sieves. Size of mesh required for fabrication of Sieves is 3' x 3' (feet). All the four sides of the mesh are fitted with wooden plates for support. These sieves are made to classify sand and pebbles in desired sizes.

Sieving Mesh: For sieving of RHA, a sieve of 420 micron (# 37 mesh) size were fabricated. For the fabrication of sieve, standard 37 number mesh available in the market was used. The sieves were made from the 40 litres size plastic tub available in the market. The bottom part of tub and 36-mesh sieve were cut in proper size. Then the mesh is sealed to the cut tub. The fabricated sieves were used to classify to the RHA in 420 micron size.

Weighing balance : The capacity of the weighing balance is 10 Kg. The weight box contains standard weights of 2, 10.5, 0.2 01 Kg. etc.

Mechanical mixer / Tapi : It is commercially available mixer used for concrete mixing. The size of mixer is 5/3 cubic feet. The capacity of the mixer is 150 kg. Tapi is a small mixing tool for hand mixing.

Poking tool : The poking tool is made up of stainless steel rod, which is used to poke the material for uniform packing.

Ramming tool : Ramming tool is fabricated using mild steel. The ramming tool is made up of two parts, as shown in figure. The total weight of tool is 3 Kg.

Others : All other items used in the fabrication process are listed in Table

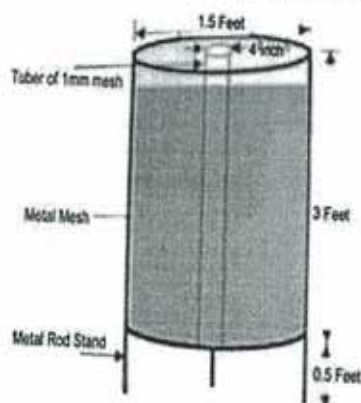
Table list of accessories required for the fabrication process.

Item	Quantity
Tube in basket burner (2 x 3)	1
Sieves with 1, 3, 5 and 10mm, mesh (3' x 3')	1 each
Sieve 420 micron (37 mesh, Size 12 inch)	1
Weighing Machine (10 Kg capacity)	1
Tubs (100 litre)	2
Bucket (25 litre)	2
Ramming Tool (2.5 Kg.)	1
Mixing tool (Tapi)/mechanical mixer	1
	2

Filter Fabrication Process : The procedure for fabricating filter bed is summarized in figure 3. The fabrication process is divided into three main processes.

- Pre-treatment of ash
- Classification of sand and pebbles
- Container preparation
- Casting process

Burning of Rice husk : Burning of rice husk is done in Table-in-Basket (TIB) burner. The tube and basket is fabricated using 1mm mild steel mesh. The size of basket is 1.5 feet in diameter and 3 feet in height. Inside basket a tube of 4 inches of diameter is placed as shown in Figure 2. The basket was kept on a mild steel stand. The total capacity of the basket is 200 litres and it takes around 25 kgs of rice husk, which is dumped into the basket and then fired from the bottom and inside tube. The husk burns slowly and takes 12 hours to be completely burnt. Once the ash is formed let it cool to normal temperature. The weight of ash obtained from burning 25 kgs of rice husk is around 8 kgs. Then store the dry ash in dry plastic containers.



Pre-treatment of ash

Rice husk ash (RHA) is prepared by burning rice husk. Burning of rice husk can be done in two ways by using Tube in basket burner and basket burner (heap burning).

Pre-treatment of Rice Husk Ash (RHA) involves

1. Sieving Process
2. Acid Treatment
3. Drying Process

Schematic of Tube-in-Basket (TIB) burner for burning rice husk

Sieving process : Take 500 grams of RHA in a 37 mesh (-420 micron) sieve. RHA is a brittle, soft and light material. Crush the ash with hands and shake the sieve. The time taken to sieve 500 grams of ash is 15 minutes. The percent loss of ash in sieving process is 10%. Repeat the above procedure. The classified ash is stored in dry containers.

Acid treatment : Take 6 kgs of -420 micron size ash in a 100 litre capacity container. Add 50 litres water to it. Add 250 ml of concentrated HCl, measure the pH. Keep the ash soaked in water overnight. Drain the water slowly and wash the ash with water 1-2 times. Dry the ash in the open for 2 days. After drying store the ash in dry container.

Classification of sand and pebbles : The pebbles or granite aggregates are sieved through 10 mm mesh in 3'x3' size sieve. The -10 mm fraction is sieved over the 5 mm mesh. The size - 10mm +5 mm is then washed with water, dried and stored in dry and clean containers. Similar sand is sieved in two sizes, one is -3mm + 1mm size. Both the fractions are washed thoroughly with water, then dried and stored in dry containers.

Fabrication Process Steps for RHA filter Element.

Container preparation : The dimensions of the container used for bed casting are top diameter of 23 cm, bottom diameter of 19 cm and height 8 cm. The holes were made in the container by piercing a hot nail through it. The number of holes made in the container is fixed to 100-120 numbers. Take the nylon mesh (any specification). Cut two meshes of 22cm and 18-cm diameter. Place the nylon mesh in the filter bed container over the perforations made in it.

Preparation of filter bed : The preparation of filter bed consists of two processes, mixing the material and then casting.

Making the slurry for filter bed making

Weighing Take required quantity of RHA, OPC & Pebbles. The table 2 shows the amount to be taken for a single filter. Similarly, weigh the required quantity of material for a batch of 10, in similar proportions.

Table 2 Quantity of material required for fabricating one filter element

Material	Quantity	
	For 1 filter	For 10 filters
RHA (-420 micron, acid treated)	470 gms	4.7 kg.
OPC Cement	30 gms	300 grams
Pebbles or Aggregates (passing 10 mm mesh)	3 Kg.	30 Kg.
Water	1200 ml.	12 litres

Mixing

Take the weighed quantity of pebble put them in the mechanical mixer/mixing container, add 300 ml of water and mix thoroughly (mechanical / hand mixing) so that the pebbles are wetted by water. Then add cement to the mixer and mix it thoroughly for a minute. After mixing add ash and water in it and again mix thoroughly. Again add water gradually with continuous mixing. Then mix it for 3 minutes. The same procedure is followed for mechanical mixing. The order of adding material and mixing time should remain fixed. This being a crucial step determining subsequent filter performance, the order of mixing has to be maintained.

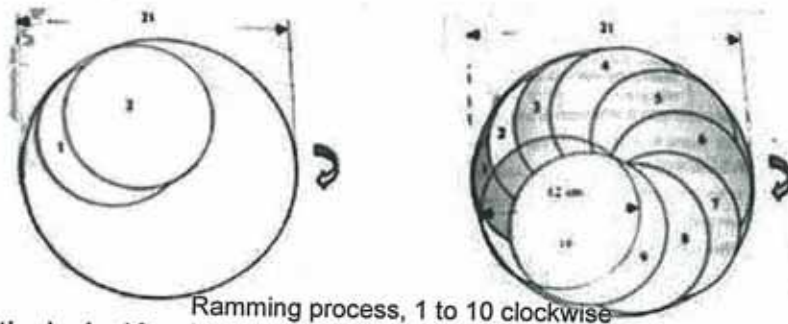
Fabricating the filter element:

Casting: The above mixture is poured into the filter bed container. Slight poking with a metal rod is done while the mixer is being poured into the container.

Poking : After casting, take the weight of the container and material. The weight should be 4.2 to 4.3 kg. The poking was done using steel rod 40 times, all round the bed.

Ramming : The ramming process is the crucial step. The ramming was done using recommended ramming tool. The ramming process is shown in figure 5. In each cycle 9 rams were done in clockwise direction and one at the centre, hence a total of 10 rams was done per cycle. Ramming is done for 3 complete cycles. The

excess water squeezes its way out through the bottom while the filter mixture starts to set. Then keep the bed for 24 hours for bed mix to set.



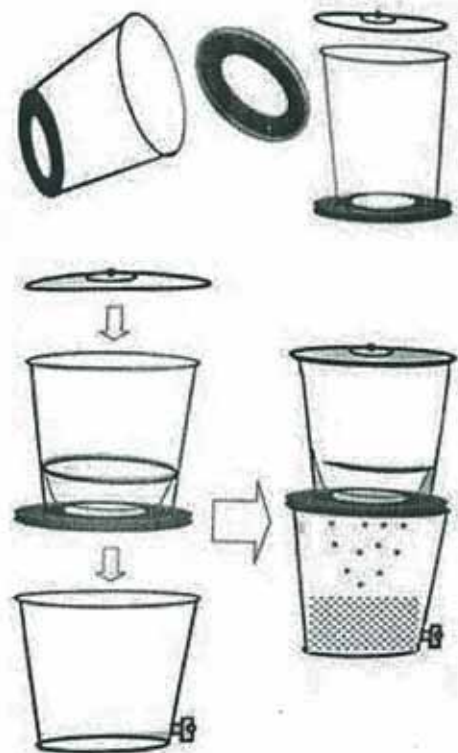
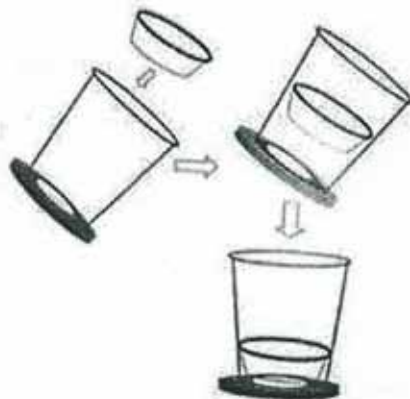
Ramming process, 1 to 10 clockwise

Sealing the top of the bed : After the setting of the filter bed is over, about 200 grams of sand is placed on top of the filter bed to prevent RHA particles from floating while water is being poured. Place a perforated plastic plate on the blade. Prepare a sealant mixture of sand and cement in 1:1 ratio. Seal the top plate to the container with sand – cement mix.

Curing: Then the filter bed is covered with wet cloth and cured for 21 days by sprinkling water over it every day.

Preparation of outside containers: The filter assembly is made up of two containers. The top container is cut from the bottom using cutting plate of proper size. The cutting plate is heated and then pressed to the bottom part of the container to get a hole of that size.

The bottom container, in which filter water was collected, was fixed with a tap cock. The tap was fixed in the container by punching a hole in the container.



Fixing of bed in the container : Fixing the bed to the container is a very important step. The bed has to be properly fixed inside the container. The gasket of proper size was fixed over the bed and the bed with gasket was slowly and vertically inserted into the container. Once it was properly placed then the bed was pressed at the rim of the bed container to fix the bed tightly. The leakage test has done by putting water into the gap between outside container and the bed over the gasket. The leakage was checked by visual observation.

Testing of filter bed: Testing of fabricated bed is done by filtration rate measurement. The average filtration rate of filter bed should be around 2 to 3.5 litres/hour. This test is the quality check for fabricated filter bed. If filtration rate is out of 2-3.5 litre/hour range, filter bed should be discarded.