

## MAKING MCK DESIGN IN BOJONGSARI VILLAGE, NEGLASARI DRAMAGA-BOGOR VILLAGE

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### Abstract

Knowledge of residents in Bojongsari Village, Neglasari Dramaga-Bogor Village The importance of toilets (Bathing and Washing) or toilets in every resident's house so as not to cause diseases in the future is very minimal. Of course, this is not healthy for everyone and this is a nest of diseases in the future. The benefits of making this toilet are the realization of a good and healthy community, the realization of hygiene facilities in the form of toilets, the growth of public awareness to maintain and prosper the environment, specifically the purpose of this Community Service activity is the realization of beauty and comfort and improving the health of residents with the creation of toilets. The methodology for the implementation of this program uses the design method used to make toilets and uses the basic method of simple civil engineering development using human resources and materials imported from the local area. The result of this activity is in the form of the design and building of a new MCK (Washing Bath) which is located on vacant land in the middle of the village bamboo clump area consisting of 2 toilets and an ablution place for the community. The conclusion of the results of this activity is a community activity to be a reference in the implementation of the construction and provision of cleaning facilities in the form of toilets anywhere.

**Keywords:** MCK (Bath Wash Toilet), Healthy, Development

### INTRODUCTION

The awareness of the importance of a holy place has actually been attached to the understanding of every human being. Cleanliness is part of what is intended. However, this desire and hope must be postponed along with the condition of ability that is not entirely material.

A healthy environment is the hope of all humans, a clean culture is one of the main factors to realize a healthy environment. The entire community is aware of the importance of health, that's why in Bojongsari Village, Neglasari Dramaga Village, Bogor, cleanliness is one of the programs that must be carried out by every community.

The facilities in Bojongsari Village, Neglasari Dramaga Village, Bogor are one of the facilities that are really needed to create a healthy environment. On that basis, the people of Bojongsari Village, Neglasari Dramaga Village, Bogor plan to build a toilet to create a healthy environment

The theory used in the design and construction of this toilet is the theory of post-modernism which means it is an anti-modernism movement. The explanation for the design and construction of the MCK is that in the mainstream modernism and structuralism theory is that the location of the MCK must be far from residential areas. With a modernist philosophy, the location of the toilet and purification is united with the settlement. This is that postmodernism has indeed been widely applied from the 20th century until now.

The purpose and purpose of this activity is to carry out KKN GTM by providing contributions in the form of designs to be given to the community Bojongsari Village, Neglasari Dramaga Village, are:

1. The realization of a good and healthy society.
2. The realization of hygiene facilities in the form of toilets.
3. The growth of public awareness to maintain and prosper the environment.
4. The realization of beauty and comfort and improving the health of residents with the construction of this toilet.

## **RESEARCH METHODS**

This activity uses the design method as a reference for its implementation with the title MAKING MCK DESIGN. The implementation of the design is preceded by conducting a survey to the location where the toilet product or building will be realized.

### **1. Place of Construction and Implementation**

This activity is planned to be held in KAMPUNG BOJONGSARI, NEGLASARI VILLAGE, DRAMAGA-BOGOR with the location of the toilet placement on a vacant land in the central bamboo clump area of Bojongsari Village, Neglasari Dramaga Village. For the implementation of the making and design planning of the MCK, it is coordinated by the head of the local RT and residents to be designed and adjusted to the location where the MCK will be built.



**Figure 1. Bamboo clump area of Bojongsari Village**

### **2. Development Plan**

The construction of cleaning facilities in the form of toilets was carried out which began in early October 2021. The Planning and Design of the MCK has been carried out since September 1, 2021.



**Figure 2. Location of the construction of the MCK**

### 3. MCK Development Implementer

The construction of the toilet is carried out by the community in Bojongsari Village, Neglasari Dramaga Village, and will be supervised by the driving force for the implementation of the activity.

### 4. General Requirements of MCK

- 1) The public toilet construction plan can only be implemented after meeting the requirements that have been determined as follows: location, number of users, clean water supply system, wastewater disposal system.
- 2) Ability of MCK managers.
- 3) Water, waste from public toilets must be treated before being disposed of so that it does not pollute water, air and soil in the residential environment.

The location of the toilet will be built on vacant land in the central bamboo clump area of Bojongsari Village, Neglasari Dramaga Village, which is indeed intended as a community facility in the area. The position of the toilet will be built according to the contour of the Land and the area area, as seen in Figures 3 & 4.



**Figure 3. Location of the construction of the MCK**





**Figure 4. Map of MC construction site**

## RESULTS AND DISCUSSION

This procedure includes terms and definitions, requirements that apply to toilet room facilities located in the locations mentioned above, with a maximum user load of 2 people. Public toilets can be used as a separate building for bathing, washing and toilets.

Results that can be felt in a lang-sung manner by the community Bojongsari Village, Neglasari Dramaga Village after the implementation of the manufacture and toilets.

### 1. Source of Clean Water

Clean water sources include:

- 1) PDAM (Regional Drinking Water Company) groundwater: the source of clean water that tastes from groundwater, the location is at least 11 meters from the source of contamination the source of clean water sources and groundwater extraction can be in the form of:
- 2) Drilled well: the perimeter of the well must be made of waterproof material at least 1.20 m wide and the well casing pipe must be made of a waterproof floor to a depth of at least 2.00 m from the floor surface
- 3) Digging well: the perimeter of the well must be made of a watertight floor at least 1.20 m wide and the walls must be made of safe, strong and waterproof construction up to a height of 0.75 m and below at least 2.00 m and below the floor surface
- 4) Rainwater sources: for areas with rainfall above 1 300 mm/year, good rainwater reservoirs can be made
- 5) Springs: equipped with a water catchment building.

### 2. Building Material Criteria

Materials that can be used for public toilet buildings are:

- 1) Local building materials
- 2) Facility of preparation of building materials
- 3) Easy to implement
- 4) Acceptable to the user community

### 3. Clean Water Pipe

Clean water pipes are as follows:

- 1) Clean water pipes embedded in the ground can be used PVC, PE with a diameter of at least 12.5 mm
- 2) Clean water pipes installed on the ground and without protection can be used SNI 03-2399-2002 pipes 7 out of 11 iron with a diameter of at least 12.5 mm

### 4. Wastewater Pipes

Dirty water pipes are as follows:

- 1) Minimum diameter 150 mm for pipes made of clay or concrete and 110 mm for PVC pipes
- 2) Slope of at least 2%
- 3) Each turn must be equipped with a control tank for pipe controller/cleaning. Each wastewater disposal unit is equipped with a water harness.

### 5. Bathroom

The bathroom can be equipped with a roof, a water bath and a door. The requirements for bathroom facilities are as follows:

- 1) The floor area is at least 1.2 m<sup>2</sup> (1.0 m x 1.2 m) and is made non-slippery with a slope towards the drain hole of approximately 1%
- 2) The wall separates the space from one another.
- 3) Door doors, with the following door sizes: width 0.6 - 0.8 m and minimum height of 1.6 m
- 4) Bathtub water reservoir used for bathing with dipper. Ventilation and lighting to ensure the implementation of clean air renewal and sufficient lighting in the bathroom, ventilation must be held and must have a light hole that directly connects with the air as a natural reflection
- 5) Clean water facilities used for bathing water can be discharged into the drain system or septic tank in accordance with applicable regulations

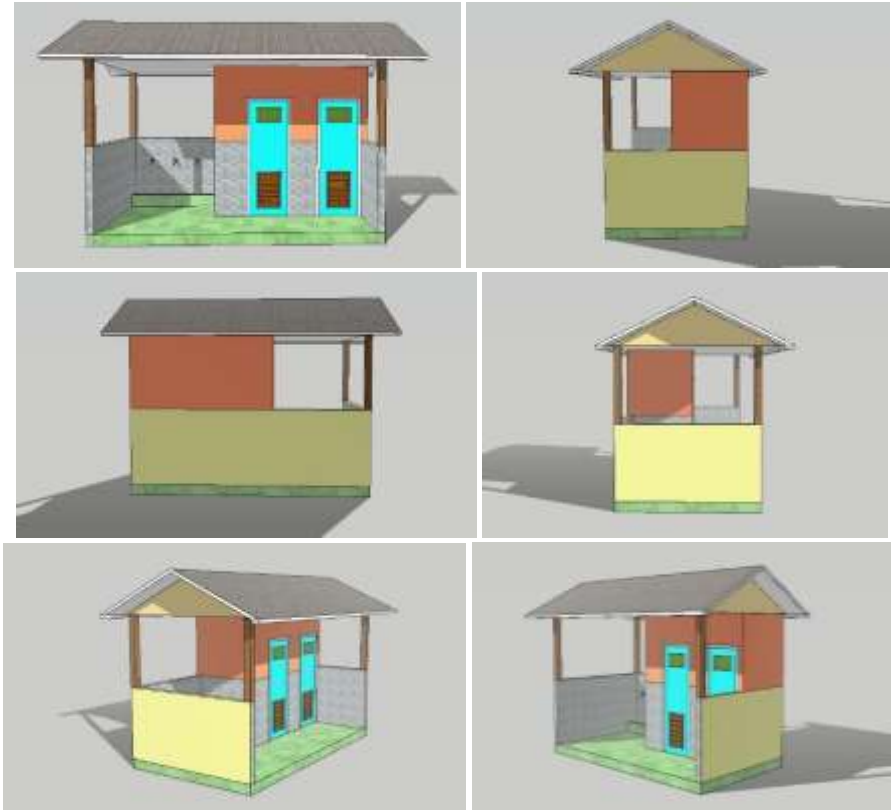
### 6. Toilet Facilities

The requirements for toilet facilities are as follows:

- 1) The floor area is at least 2.0 m<sup>2</sup> (1.0 m x 2.0 m) and is made non-slippery with slopes towards the floor drain.
- 2) Walls, ventilation doors and lighting if equipped with walls, doors, ventilation and lighting, then the provisions as listed in the bathing facilities for walls, doors, ventilation and lighting can be applied to toilet facilities
- 3) Squat toilet with the following conditions:
  - (1) The leg place must be made as a squat toilet
  - (2) Diameter of the fecal inlet hole 10 cm
  - (3) The distance between the walls of the building to the toilet is 20 cm - 25 cm
  - (4) toilet length 40 cm and width 20 cm
  - (5) The toilet seat can be raised at least 10 cm from the floor with a slope of 1% equipped with a water trap
- (6) Clean Water Facilities The number of faucets used must be adjusted to the needs.

## 7. MCK Design

After the observation stage above, the design and planning are made using three-dimensional software. The design results are three-dimensional works can be seen in Figure 5.



**Figure 5. MCK Design**

## CONCLUSIONS

Thus, this community activity is to be a reference in the implementation of the development and provision of hygiene facilities in the form of toilets anywhere. The hope for the participation and support of all parties for the realization of the goals is highly expected. The realization of a good and healthy society, the realization of hygiene facilities in the form of toilets, the growth of public awareness to maintain and prosper the environment. The realization of beauty and comfort and improving the health of residents with the construction of this toilet

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