

MLR Institute of Technology (MLRIT) has taken an initiative to conserve water in order to reduce the dependency on water tankers in the campus and also to increase the ground water level. The following are the water conservation facilities available in **MLR Institute of Technology (MLRIT)**

1. RAIN WATER HARVESTING:

MLRIT has taken an initiative to preserve rain water in the campus through rain water harvesting pits. The rain water harvesting pits have the dimensions of 4 ft diameter and 25 feet depth. Pit has been constructed with cement ring each of height of 1 ft. Each cement ring is filled with sand and stones (Kankar) of equal quantity in layers. Pits are located at Corner of Cricket Ground, Corner of Football Ground and in Mahatma Gandhi Block. The Rain Water in the Campus is directed to the pit and allowed to sink. This helps to increase the ground water level and reduced our dependence on water tankers.

Capacity of the pit depends on the volume of water conserving.

$$\text{Volume of the water conserving} = \frac{\pi d^2}{4} * \text{depth}$$

Here d= diameter of the pit =4 ft

Depth =25 ft

Upon calculating we get 314 cubic feet of water will be conserved by each pit

Conversion of cubic feet in to cubic meter 1 cubic feet= 0.0283 cubic meter

ie each pit can conserve 8.89148 cubic meter water. Each cubic meter can accommodate 1000 liters (1 kilo liter)of water. ie . capacity of each pit is 8891.48 liters.

MLRIT has 3 Rain water harvesting pits with same capacity. ie. All 3 pits can conserve 26,674.44 liters of rain water .

MLRIT takes efforts to create awareness on rain water harvesting and water conservation among the students through Environmental Studies and also other activities. Thus, the Institution always gives due consideration for water conservation.

Geo Tagged images of Rain water harvesting pits are given in the below images.



PRINCIPAL

MLR Institute of Technology

Laxman Reddy Avenue, Dundigal,
Quthbullapur, Hyderabad-43,



Fig.1.1. Rain Water Harvesting pit at Cricket Ground

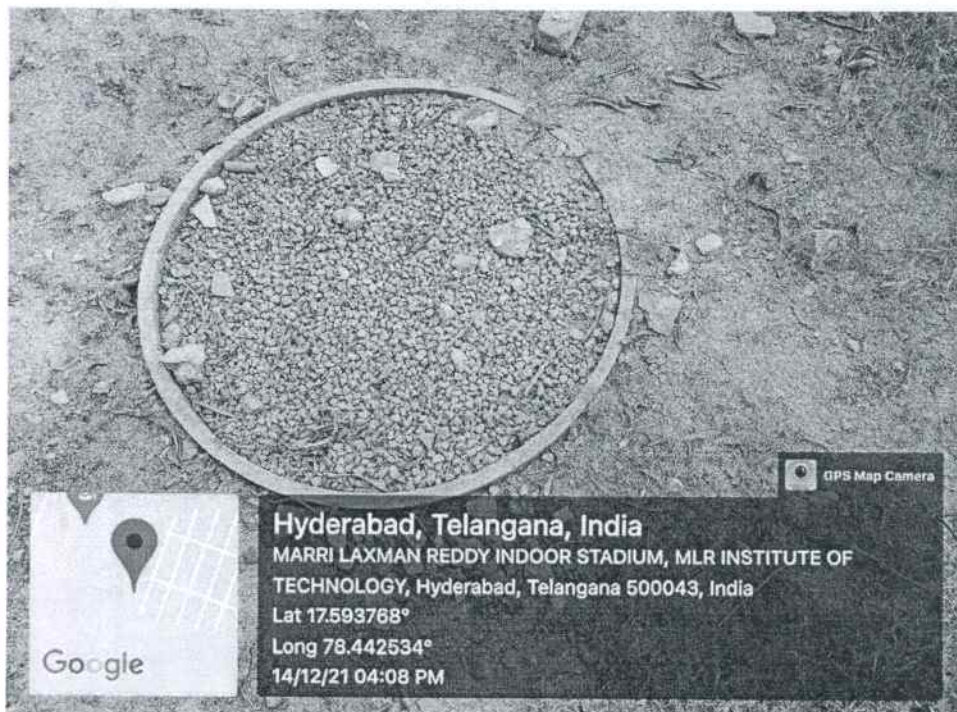


Fig.1.2. Rain Water Harvesting pit at Foot Ball Ground



PRINCIPAL
MLR Institute of Technology
Laxman Reddy Avenue, Dundigal,
Quthbullapur, Hyderabad-43,

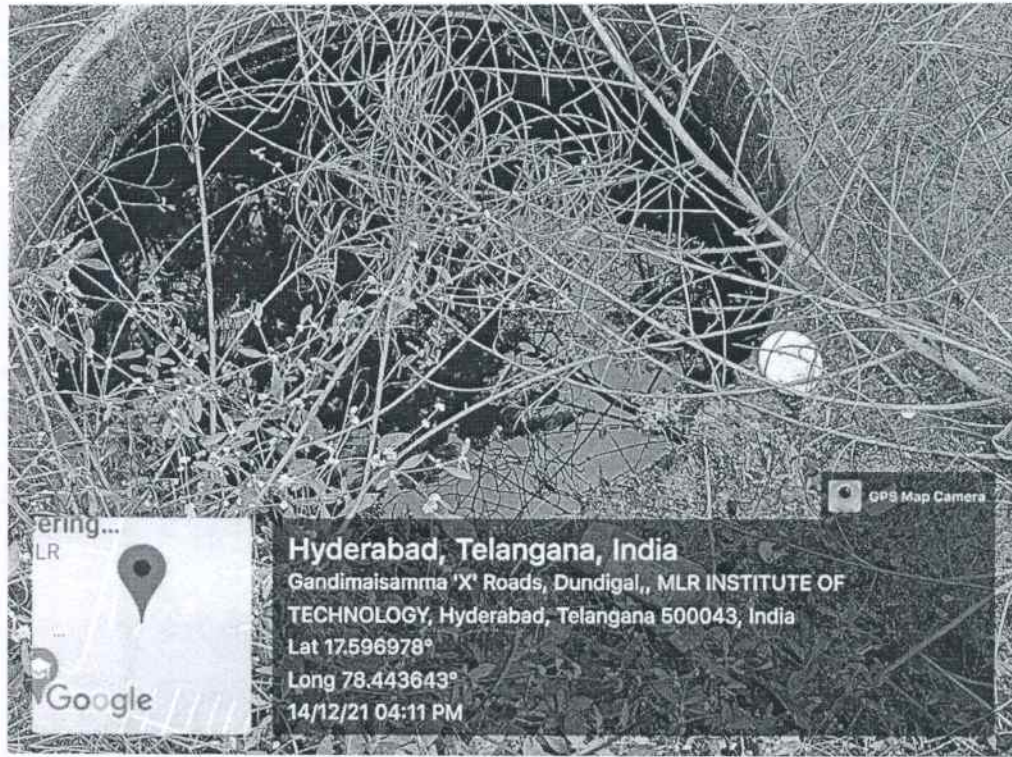


Fig.1.3. Rain Water Harvesting pit at Mahatma Gandhi Block



PRINCIPAL
MLR Institute of Technology
Laxman Reddy Avenue, Dundigal,
Quthbullapur, Hyderabad-43.

2. BOREWELL /OPEN WELL RECHARGE

MLRIT have 4 borewells with depth from 600ft to 800 ft each which are used to serve the purpose of drinking water, cleaning, watering plants and for toilets. Bore wells are located at Mahatma Gandhi Block, In Indoor Stadium, In Corner of Cricket Ground, near Boys hostel. Four water pump motors are used to pump 40,000 L water per day. The capacity of over head water tank storage and underground water tank storage are 10,000 and 20,000 L respectively. The Institution wisely makes use of this bore well water and it does not require water from corporation. As it has good water conservation from rain water harvesting system there is no water scarcity in our Institution. During summer season also the bore well water is more than enough for the usage. Geo Tagged Images are attached below.

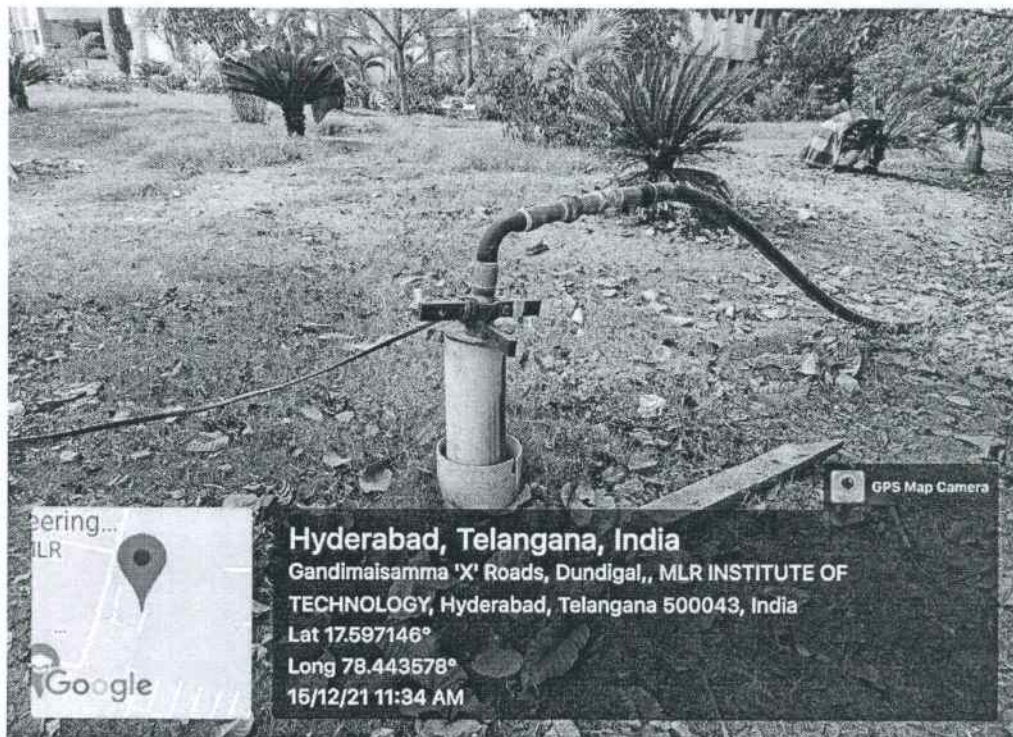


Fig:2.1: Bore well Near Mahatma Gandhi Block

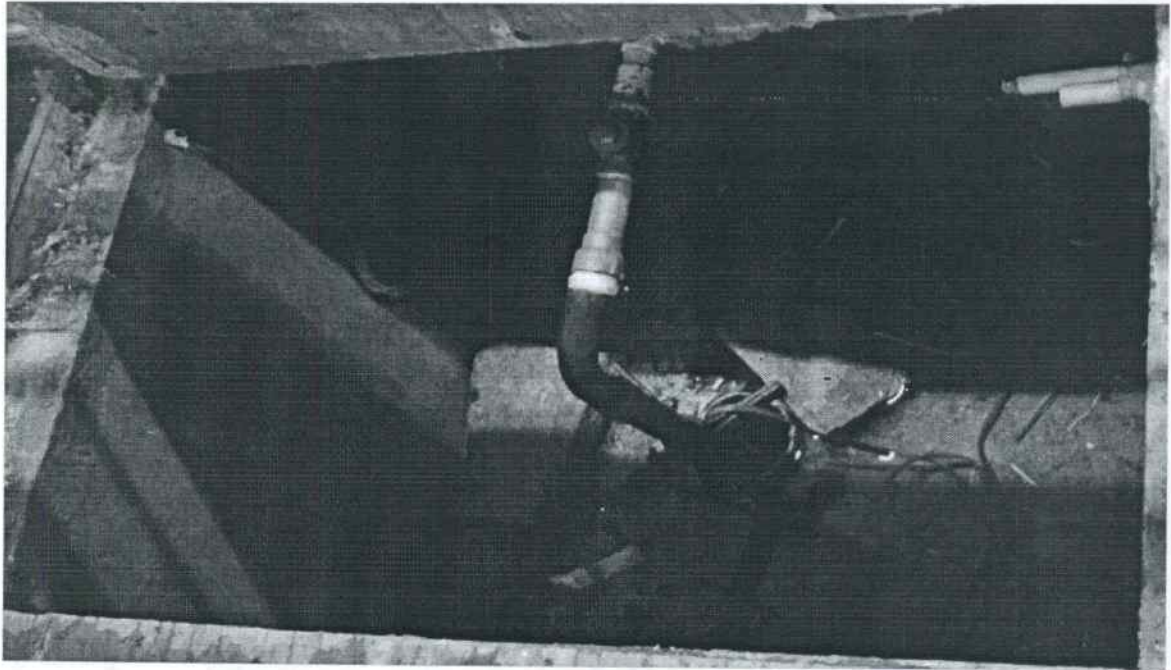


Fig:2.2: Bore well Near Indoor Stadium



Fig:2.3: Bore well Near Boys Hostel


PRINCIPAL
MLR Institute of Technology
Laxman Reddy Avenue, Dundigal,
Quthbullapur, Hyderabad-43,

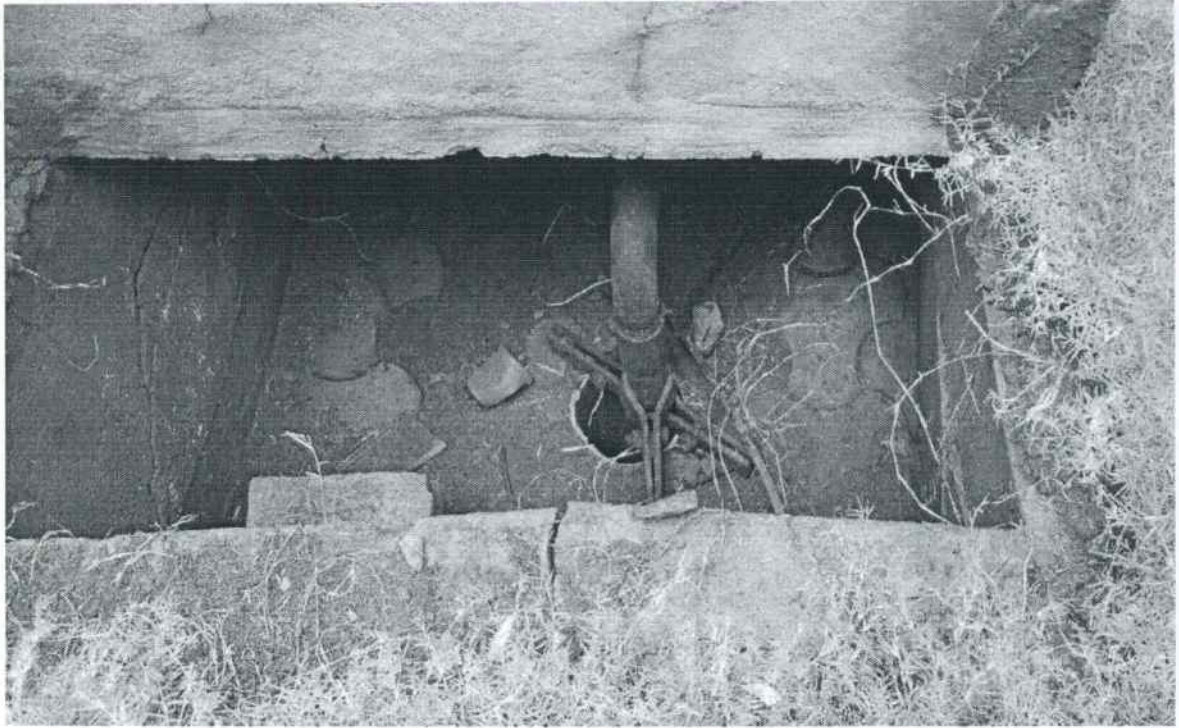


Fig:2.4: Bore well Near Cricket Ground



PRINCIPAL

MLR Institute of Technology

Laxman Reddy Avenue, Dundigal,
Quthbullapur, Hyderabad-43.

3. WASTE WATER RECYCLING:

MLRIT have Sewage Treatment plant. Waste water will be collected from the toilets of Academic blocks and Hostel blocks. The collected waste water will be chemically Treated in in Tank1 and then shifted in to tank 2 after that water will be chemically treated and it will be pumped to sumps. Ground Pipe line is laid for nearly 1500 meters to use treated water for watering plants, cricket ground, football grounds. Sprinkler systems and pipers are used to water grounds and plants. Geo Tagged images are attached below.

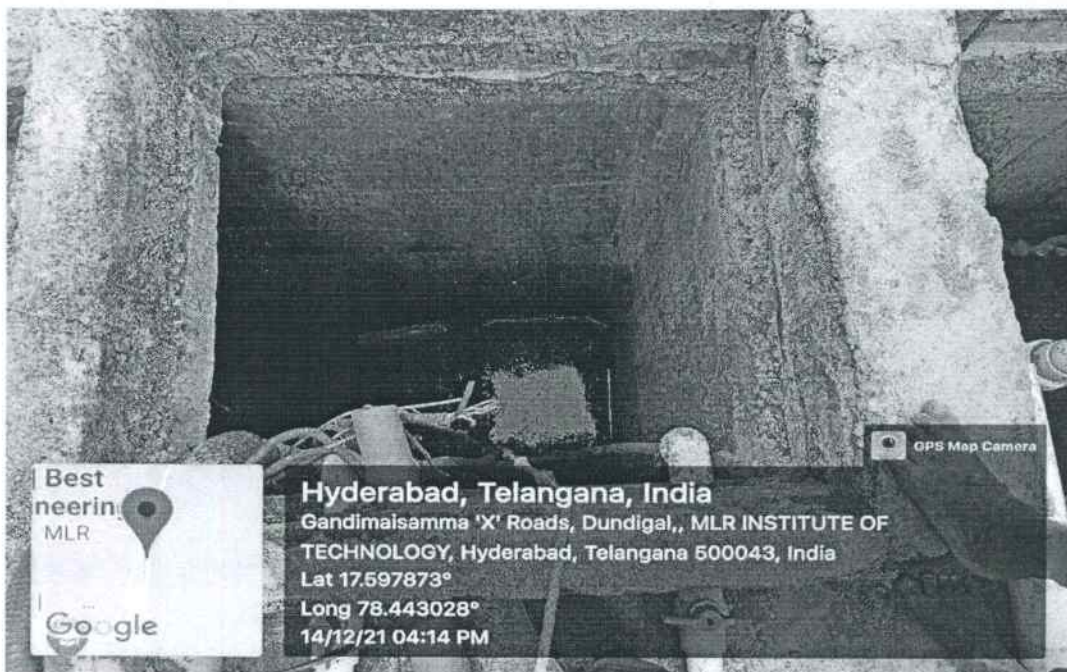


Fig.3.1. Waste water collection tank 1


PRINCIPAL
MLR Institute of Technology
Laxman Reddy Avenue, Dundigal,
Quthbullapur, Hyderabad-43,

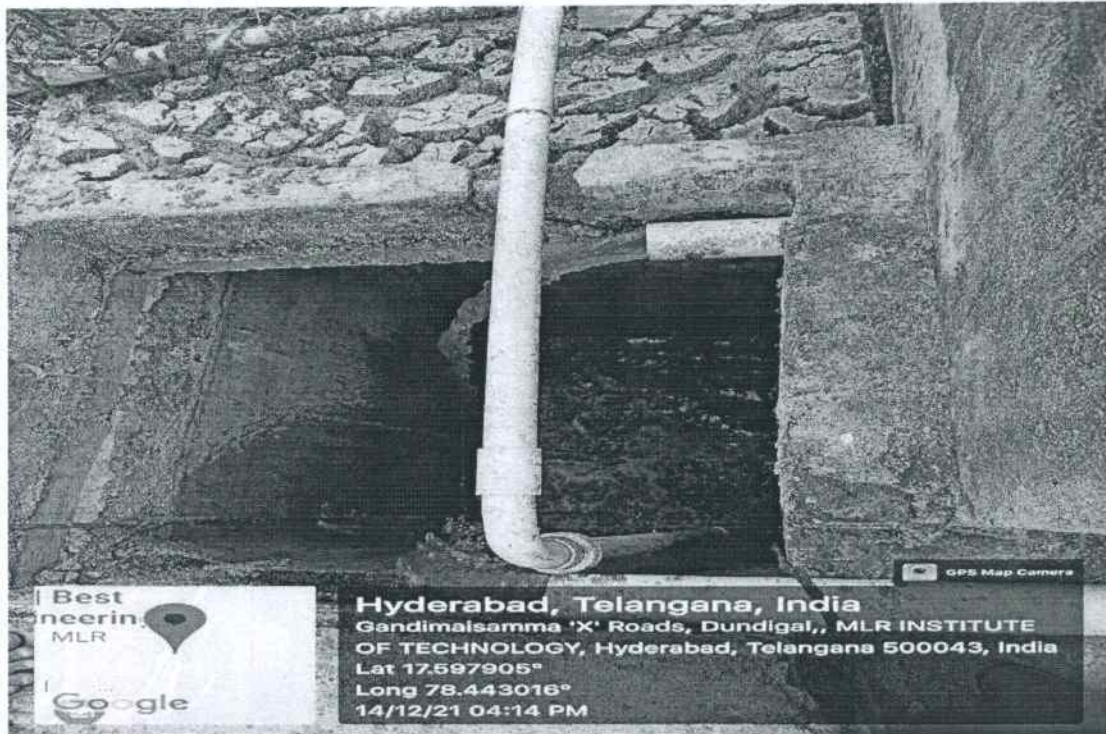


Fig.3.2. Water collection tank 2

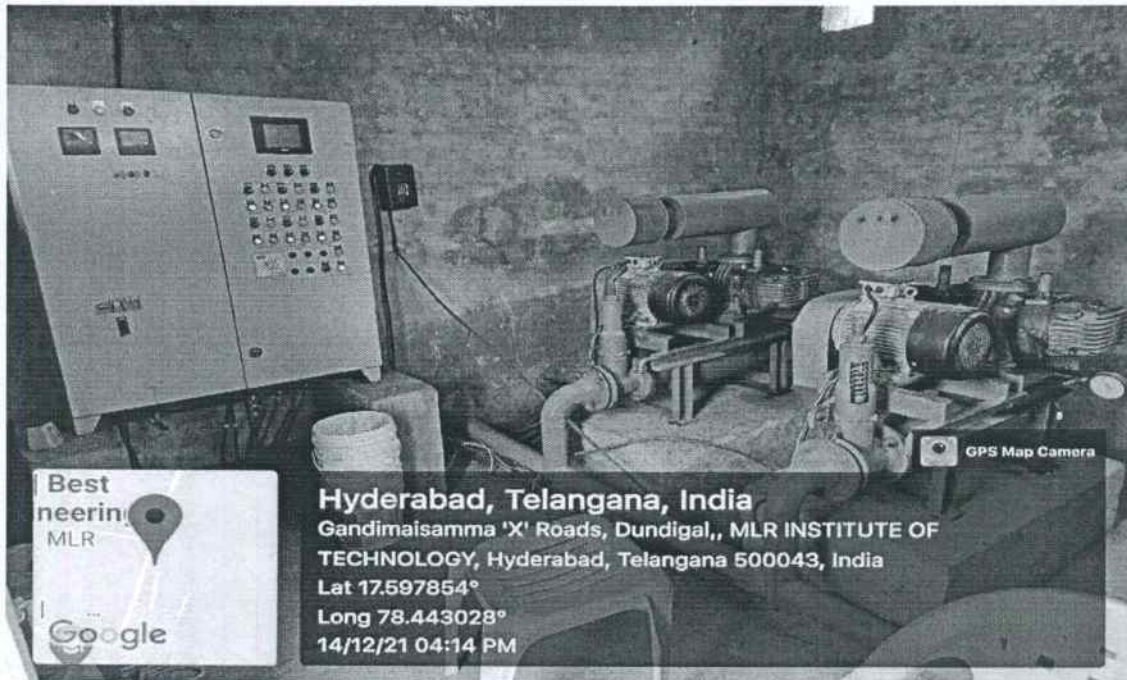


Fig.3.3.Sewage Treatment Plant

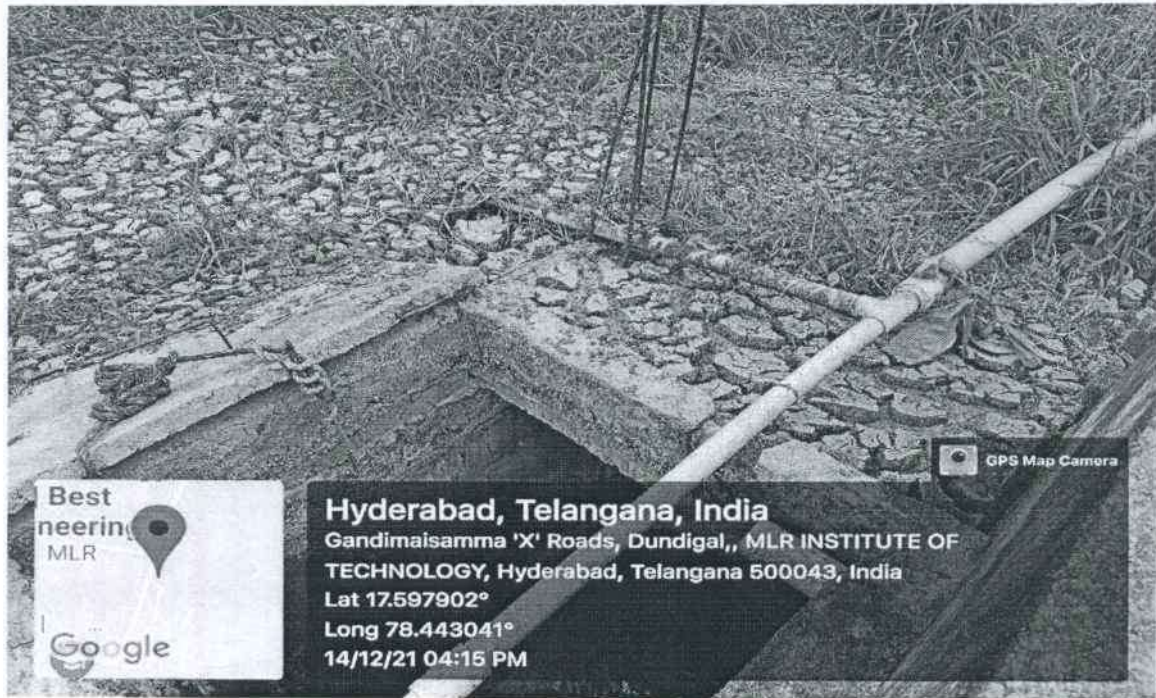


Fig.3.4. Water collection tank after Chemical Treatment

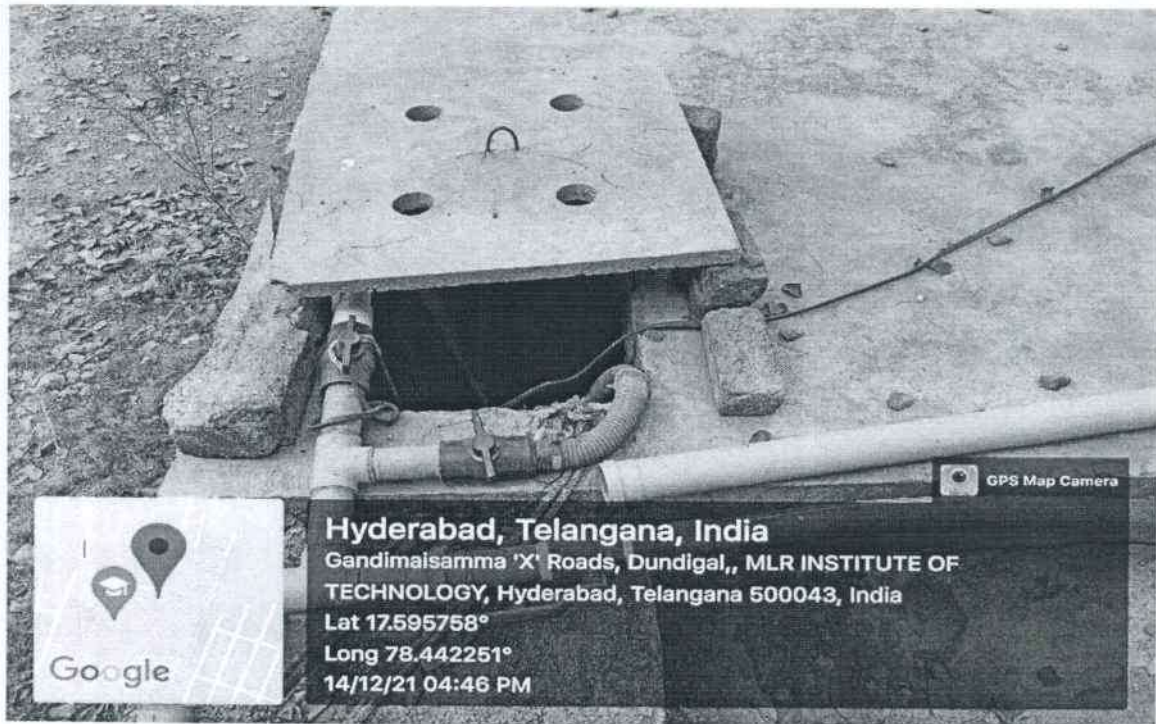


Fig.3.5.Sump for storing water


 PRINCIPAL
MLR Institute of Technology
 Laxman Reddy Avenue, Dundigal,
 Quthbullapur, Hyderabad-43,