



## **WATER CONSERVATION FACILITIES**

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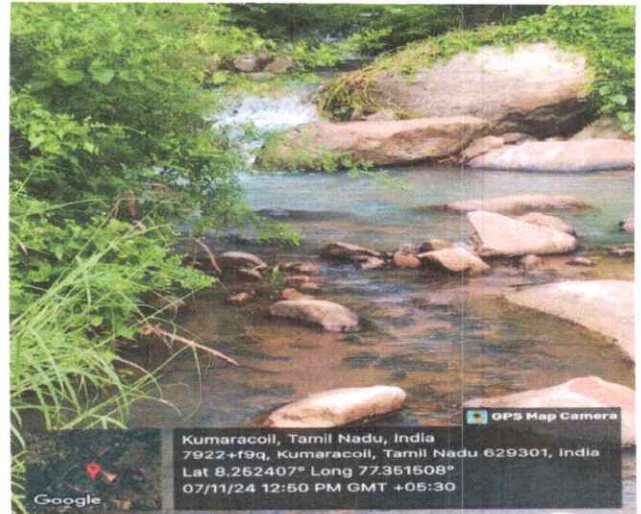
### WATER CONSERVATION FACILITIES

University have a practice of rain water channelization and natural recharging system since our campus is truly a nature friendly campus.

#### RAIN WATER HARVESTING

Rainwater is collected from the natural streams in the hills surrounding the campus and is channeled through canals across the university and hostel premises. It is then stored in tanks and water bunds located throughout the campus.

#### Natural streams in the Campus



#### Water Tank with a Capacity of 4,30,000 litres

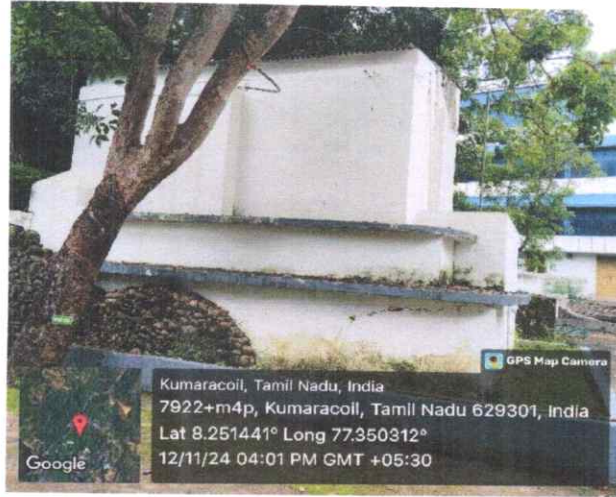


#### Water Tank with a Capacity of 1,30,000 litres





Water Tank with a Capacity of 25,000 litres



Rain Water Canal inside Gent's Hostel



Rain Water Canal inside University Campus



Water Storage bund

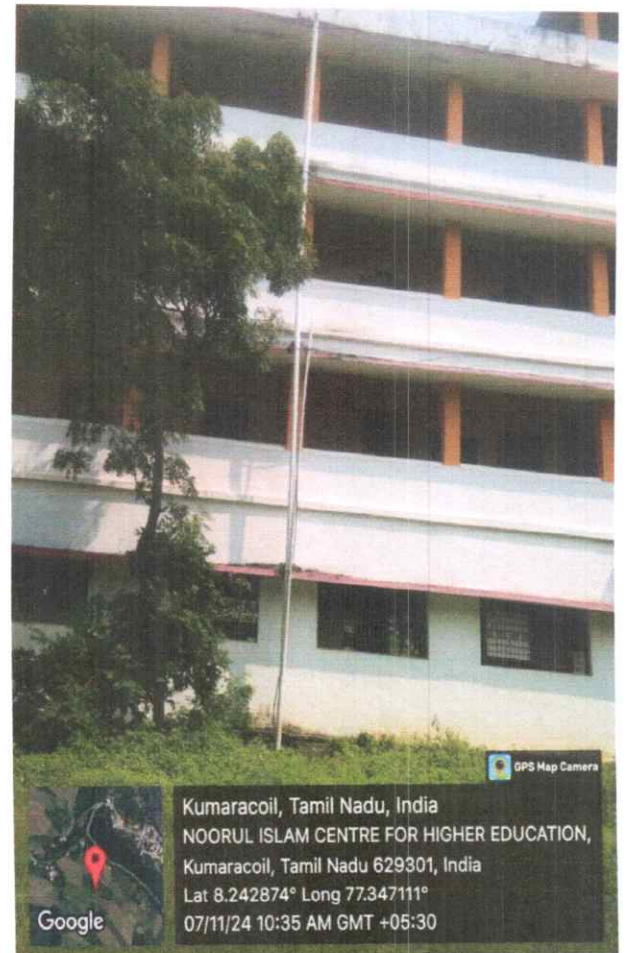
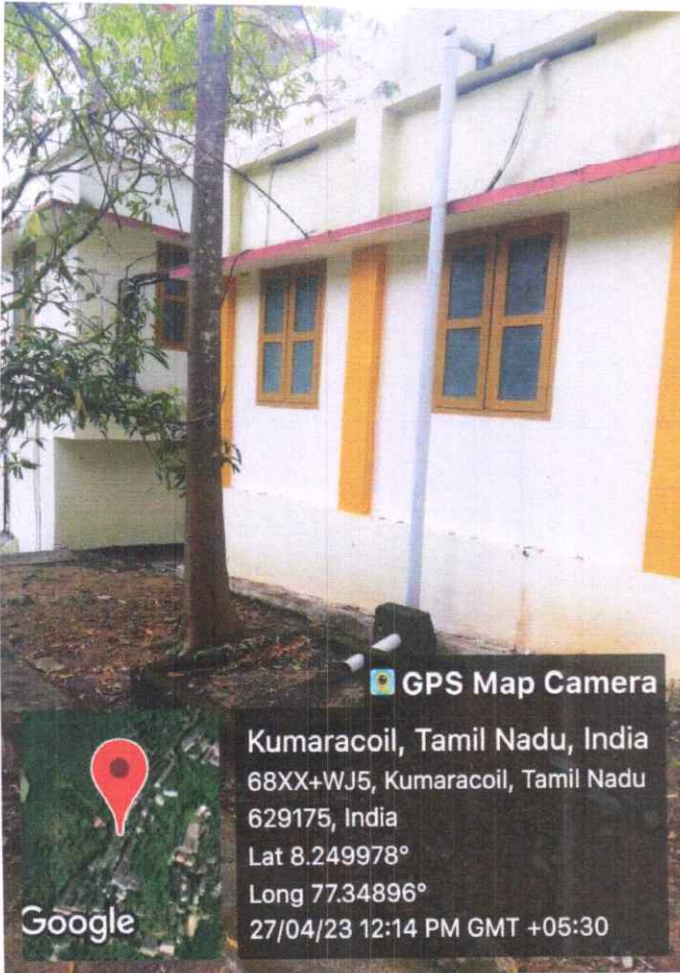




## GROUND WATER RECHARGING USING RAIN WATER

In addition to the water being stored in the bunds, rainwater from each building is directed through pipes and conveyed underground to help replenish the groundwater levels.

### *Ground Water Recharging Setup inside Campus Buildings*



With minimal concrete floor construction in the campus, sufficient rain water seeps into the ground. Apart from this, rain water harvesting pits have been constructed in each block to increase the ground water level.



**OPEN WELL RECHARGE**

Open wells are available both in the men's hostel premises and within the university campus. The water from these wells is purified before being used for various purposes, ensuring its safety and suitability for everyday use.

*Open well in Gent's Hostel*



*Open well inside the University Campus*



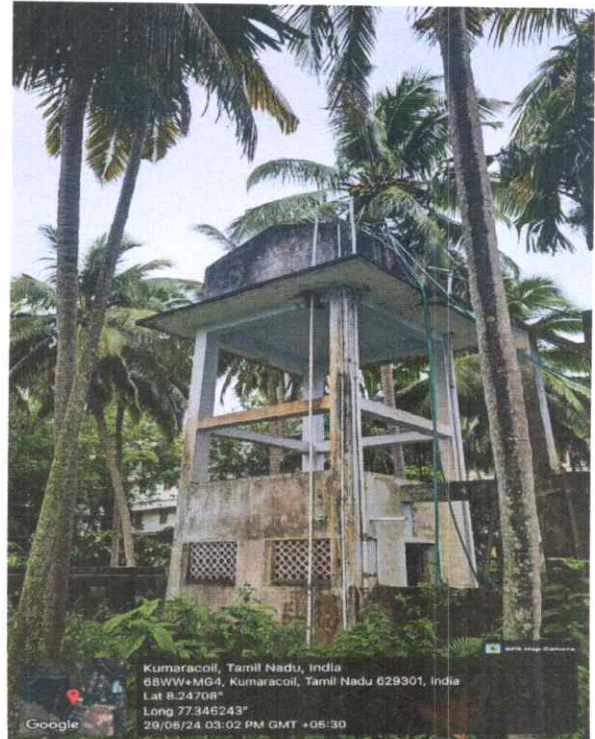


**CONSTRUCTION OF TANKS AND BUNDS**

*Water Tank*



*Water Tank*



*Water Bund in the Campus*





*Water Tank with a capacity of 4,30,000 litres*



*Water Stored inside the Tank with a capacity of 4,30,000 litres*



*Water Tank with a capacity of 1,30,000 litres*

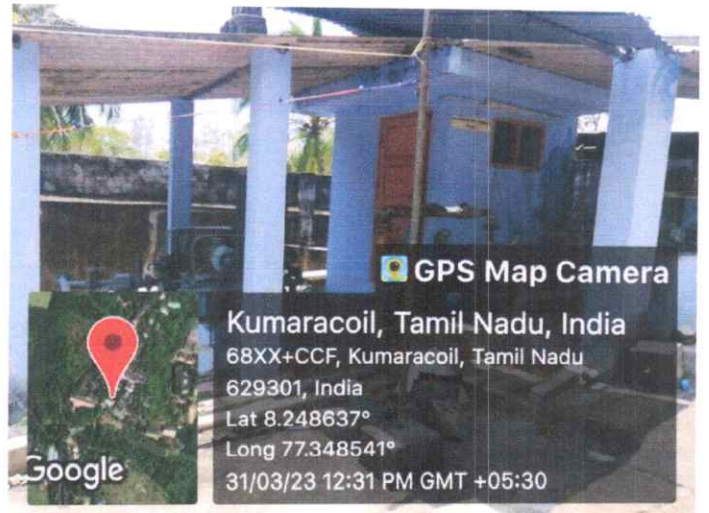




## WASTE WATER RECYCLING

Due to high water consumption in hostels, NICHE has established Sewage treatment plants in girl's and boy's hostel.

### *Sewage Treatment Plant in Girl's Hostel*



### *Sewage Treatment Plant in Boy's Hostel*







Wastewater from the entire university and hostels is routed through an underground pipeline. Heavier density materials like sand, leaves and floating greasy/oily substances are removed through grid chamber, screen chamber and degreasing tank respectively and finally reaches the collection tank.

From the collection tank, the effluent is directed to the bioreactor/aeration tank where the wastewater is digested by aerobic bacteria using it as feedstock. From the above treated water, sludge is separated by sludge settling tank and foul odour is removed using carbon filter. The filtered water is then collected in a slump and is then used to irrigate the trees and plants on the campus.

Every year sewage samples from the unit are collected by Tamil Nadu Pollution Control Board (TPCB) the parameters like, total suspended solids, total dissolved solids, chemical oxygen demand, biological oxygen demand, pH and turbidity are analysed. The quality of the treated sewage satisfies the standards prescribed by the Board at all the times.

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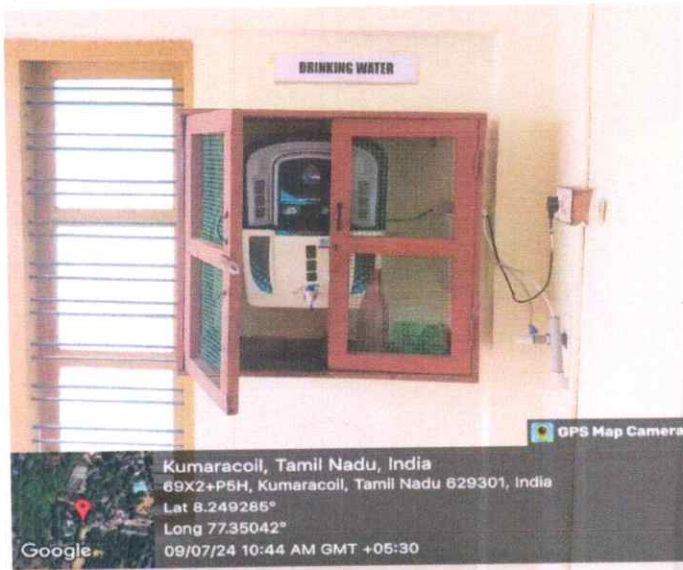
**MAINTENANCE OF WATER BODIES AND DISTRIBUTION SYSTEM**

The institution is actively involved in the construction and maintenance of several water storage systems, including tanks, water bunds, open wells, and overhead tanks, all managed by its own team of plumbers. Water from two large tanks, with capacities of 1,30,000 litres and 4,30,000 litres, is distributed throughout the campus via a well-established pipe network. To ensure safe drinking water, filters are installed in each building, and an RO (Reverse Osmosis) plant is available at the Boy's Hostel. In case of any leakage, prompt action is taken to prevent water wastage, ensuring efficient management of water resources.

**RO Plant in Gent's Hostel**



**Water filters**





*Gardner watering plants*



Kumaracoil, Tamil Nadu, India  
6/43C2, Potti Madam, Girivalam Pathai, near NI college,  
Elankadai, Kumaracoil, Tamil Nadu 629301, India  
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Long E 77° 20' 56.3748"  
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*Maintenance by the University plumber*



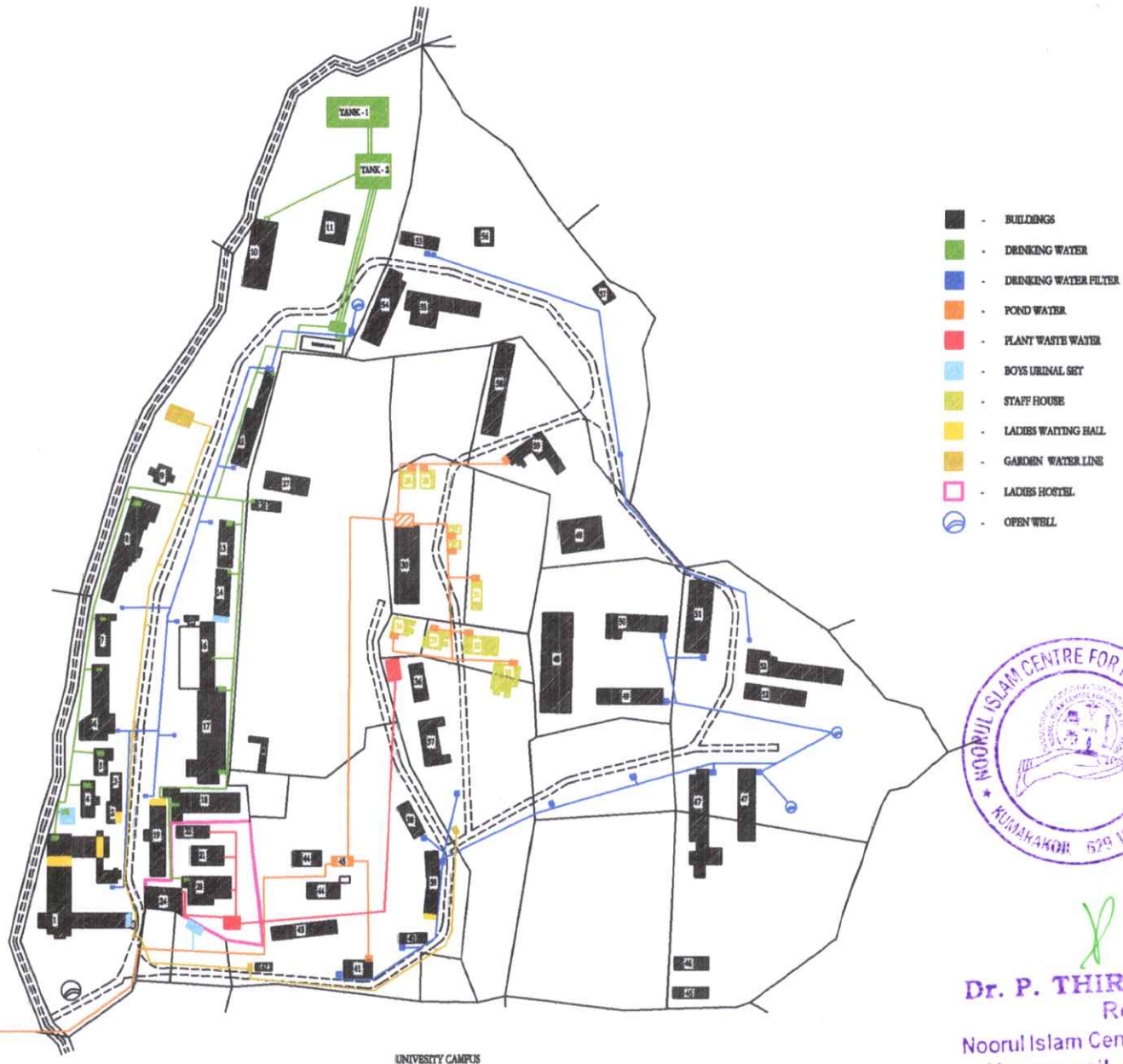
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# Water Distribution System - University Campus



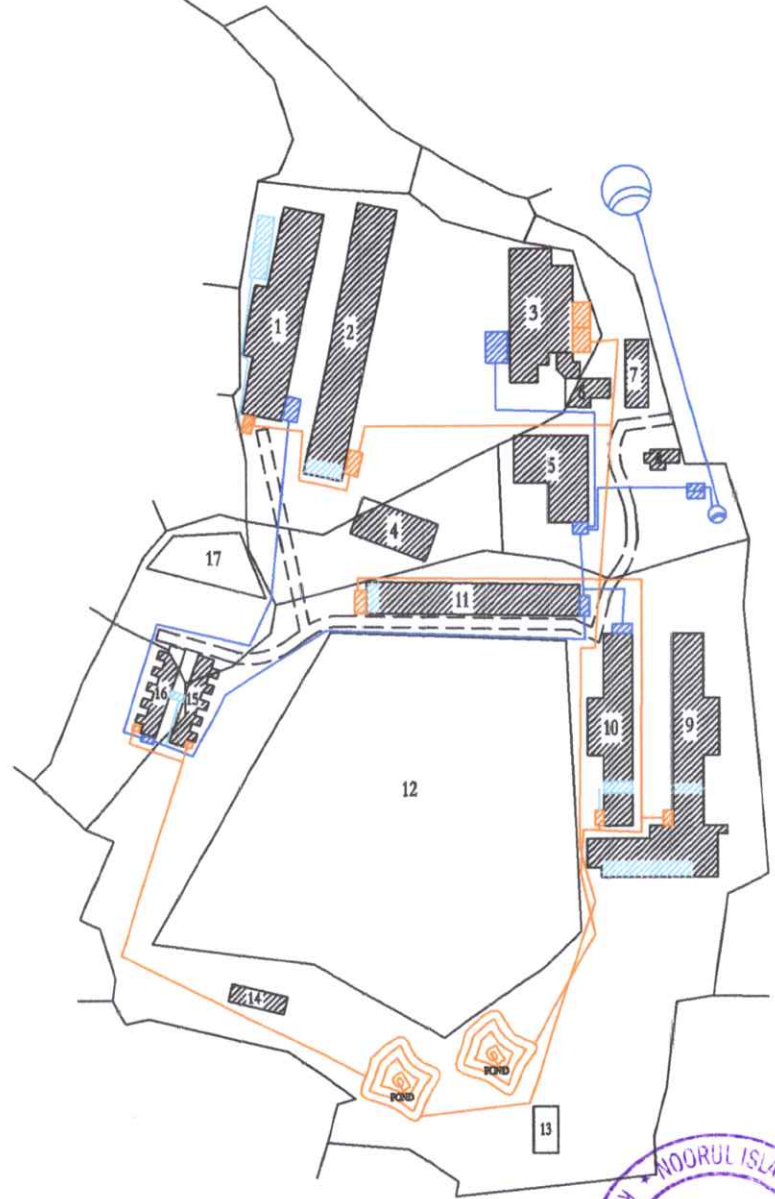
- - BUILDINGS
- - DRINKING WATER
- - DRINKING WATER FILTER
- - POND WATER
- - PLANT WASTE WATER
- - BOYS URINAL SILT
- - STAFF HOUSE
- - LADIES WAITING HALL
- - GARDEN WATER LINE
- - LADIES HOSTEL
- - OPEN WELL





*ZABO*  
Zabhiya



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**Water Distribution System - Gent's Hostel**



-  - BATHROOMS
-  - DRINKING WATER FILTER
-  - POND WATER
-  - BUILDINGS

*Zahid*  
*Rebbi VA*

GENTS HOSTEL



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