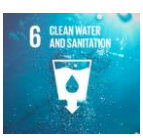
6.5.4 Sustainable Water Extraction on Campus



Our college take work toward more sustainable practices, one key area of focus is the responsible extraction and use of water. With increasing pressure on municipal water supplies and the growing need for water conservation, institutions of higher learning are turning to innovative solutions to ensure their water needs are met without depleting natural resources. One such solution is the sustainable extraction of water through **bore wells** and the establishment of **water bonds** that ensure long-term access to clean, groundwater-based resources.

Percolation Pond

Percolation pond is the most effective runoff harvesting structure that is used inside the campus. The artificially created pond has a capacity of 20,000 litres, excavated to harvest and impound the runoff from the catchments for a longer time, thereby recharging the ground water storage in the zone of influence of the pond.

Runoff collection Pond

Perforated Drain Channel:

Perforated land drain is used to collect water through the small holes located around the pipe; these holes allow water to seep from the ground into the pipe and be carried away over the drains directly into the drainage channels. This finally reaches the sewage treatment plant operated inside the campus. Here, the collected water is treated efficiently and reused for gardening, vehicle cleaning and toilet sanitation.

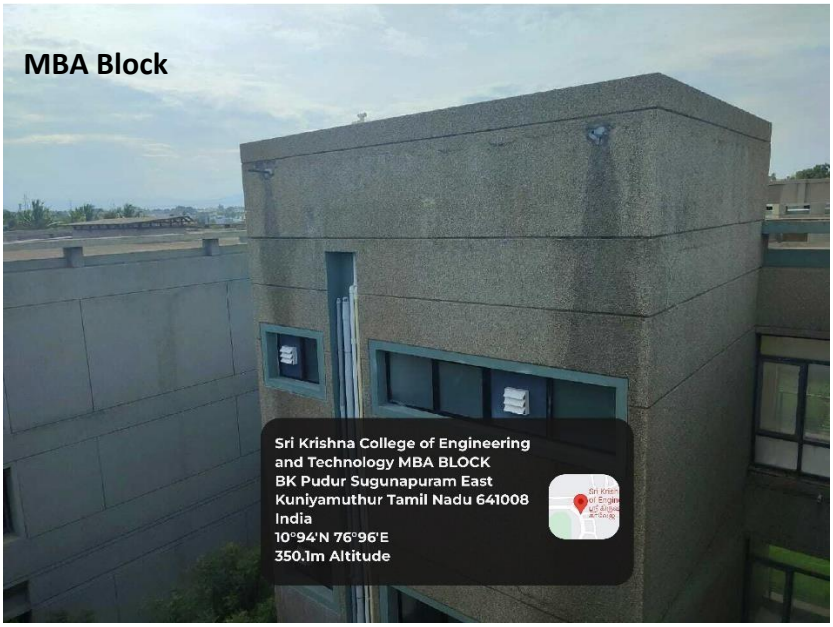
Perforated Drain Channel Slabs (Close view)

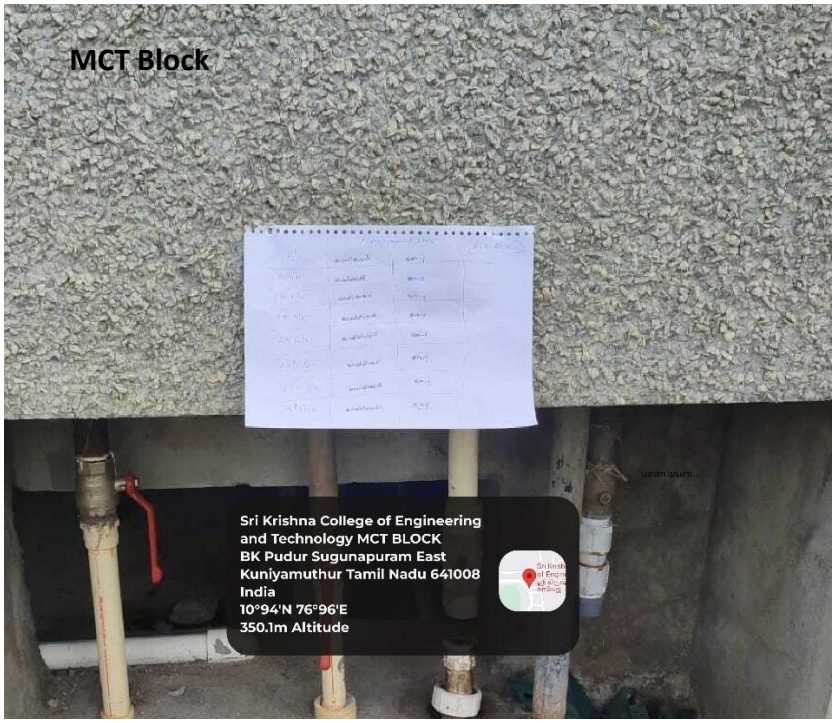
Perforated Drain Channel Slabs (Long view)

Majority of Rainwater Runoff within the campus is efficiently used to recharge the ground water, due to which no water has been stagnated within the campus. This, further helped in ameliorating the environment of the campus. The daily water requirement of the college is met from the bore wells.

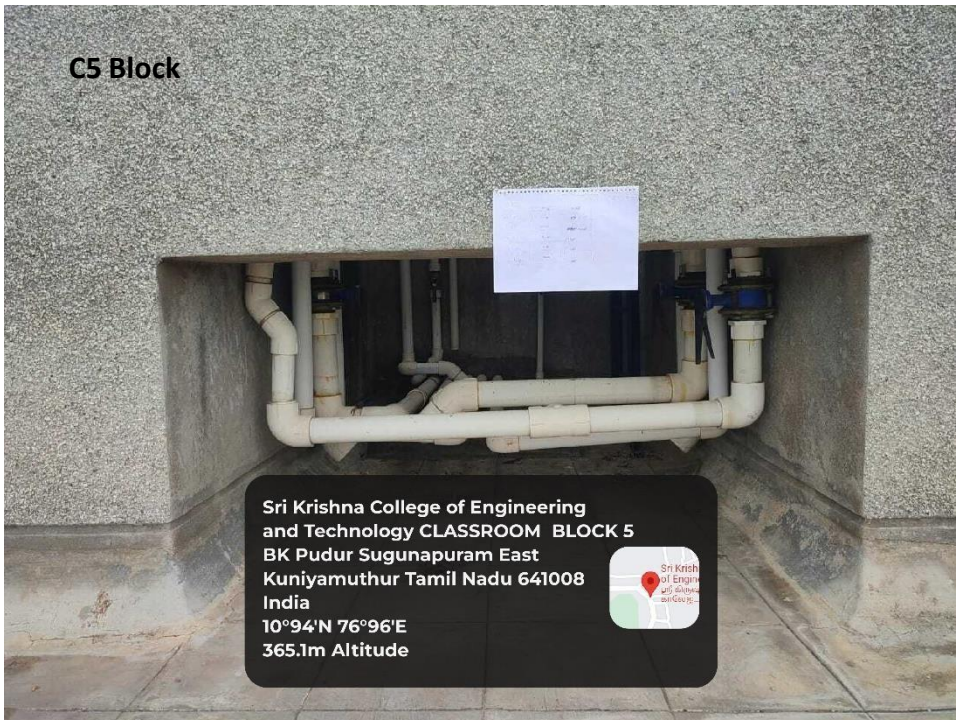
OVERHEAD TANK MAINTENANCE

Periodic cleaning of the overhead tanks in different blocks is conducted to ensure the removal of accumulated sediment, dirt, and debris. This maintenance activity aims to maintain water quality and prevent blockages in the distribution system.





OVERHEAD TANK MAINTENANCE



RO PLANT MAINTENANCE

The Reverse Osmosis (RO) plant in an academic campus is essential for supplying clean and safe drinking water to students, faculty, and staff. Regular maintenance is crucial to ensure the RO plant operates at its best and lasts for a long time. Key maintenance tasks include filter replacement, cleaning and sanitation, pressure and flow monitoring, pump and motor maintenance, and water quality testing. These measures are periodically implemented to ensure the provision of clean and potable water.

RO Plant