

#### 7.1.2.

### The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and non degradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

## **Water Conservation**

**Greater Noida Institute of Technology (Engg. Institute)** 

Plot No. 7, Knowledge Park II, Greater Noida Uttar Pradesh 201310 India

#### Rain Water Harvesting



We at Greater Noida Institute of Technology understand that "Water is the single most precious thing on earth". Also, water is a key driver of economic and social development while it also has a basic function in maintaining the integrity of the natural environment. At the same time, it is also an important component of soil and plant life. Water is considered to be a renewable natural resource since it is continually being renewed through nature's hydrological cycle and the total amount of water on earth remains constant. The institute is pro-active in the conservation of available ground water resources along with harvesting of rain water which help us to recharge ground-water and maintain the water table. As the institute grown there is significant increase in the number of recharging pits at various locations to recharge the ground water. Growth in the number of students together with changes in modernisation of washrooms have deteriorated the quality of water and heightened the pressure on water resources for the demand of good quality water. Although we never faced the water shortage in the institution but we understand the importance of water and tried to maintained our water resources in best possible way through rain water harvesting technology.

Conserving water not only protects our drinking water resources, reduces water pollution and health risks but also in order to ensure water availability for future generations, withdrawal of water from the natural ecosystem should be checked. It also saves money as conservation reduces our water bill and water-related services. The important aspect of water conservation is that it prevents those harsh conditions that occur during the drought periods. The concept of water conservation falls with three R-approach: Reducing losses, reducing use and Reusing water.

The table below shows the data of ground water harvesting/recharging pits available in our institute:

| S.No. | PIT Number and type.                          | Location                      | Remark |
|-------|---|-------------------------------|--------|
| 1     | PIT Number 1- Sediment Bed type<br>Recharging | Near side of Institute Mandir | Okay   |
| 2     | PIT Number 2- Sediment Bed type               | In the lawn behind            | Okay   |





# GNIOT ग्रेटर नोएडा इंस्टीट्यूट ऑफ टेक्नोलॉजी (इंजीनियरिंग इंस्टीट्यूट) GREATER NOIDA INSTITUTE OF TECHNOLOGY (Engg. Institute)

|   | recharging                                | Admission Cell  |      |
|---|---|---|------|
| 3 | PIT Number 3- Bore well type recharging   | In the lawn behind<br>Admission Cell                          | Okay |
| 4 | PIT Number 4-Sediment Bed Type recharging | In the Lawn of Gate No.1                                      | Okay |
| 5 | PIT Number 5-Sediment Bed Type recharging | Near Basket Ball Ground                                       | Okay |
| 6 | PIT Number 6-Sediment Bed Type recharging | In the 4 wheeler Parking area in front of Basketball court    | Okay |
| 7 | PIT Number 7-Sediment Bed Type recharging | In the 2 wheeler Parking area in front of Basketball court    | Okay |
| 8 | PIT Number 8-Sediment Bed Type recharging | Adjacent to Workshop in<br>Front of Current Exam Cell<br>Room | Okay |





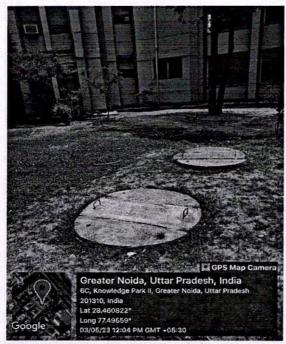


Figure: 1: PIT Number 2&3 (Closed Lid)

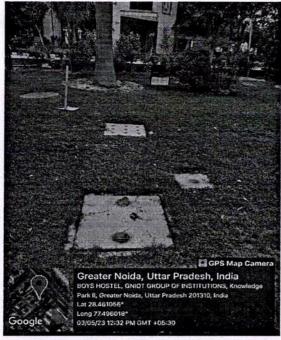


Figure: 3: PIT Number 4- Sediment Type Recharging (Closed Lid)

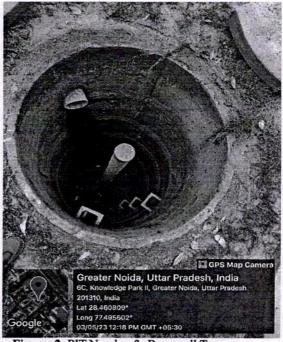


Figure: 2: PIT Number 3- Bore well Type recharging (Open Lid)

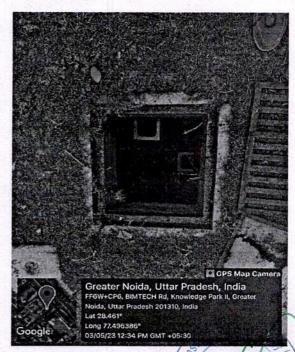


Figure: 4: PIT Number 4- Sediment Type recharging (Open Lid)

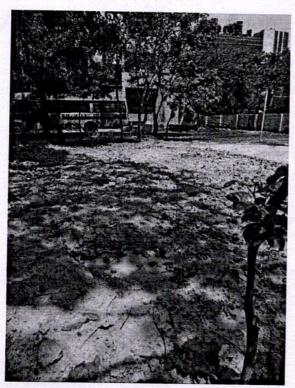


Figure: 5: PIT Number 5- Sediment Type Recharging (Closed Lid)

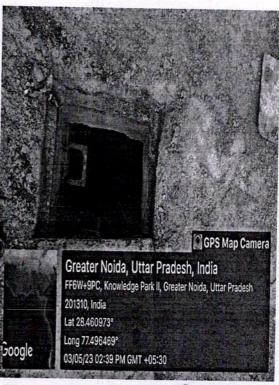


Figure: 6: PIT Number 5- Sediment Type Recharging (Open Lid)

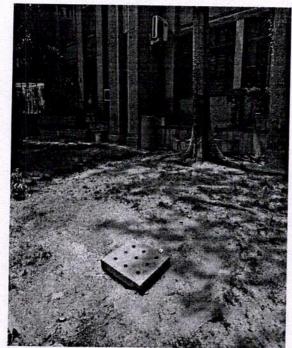


Figure: 7: PIT Number 1- Sediment Type Recharging (Closed Lid)

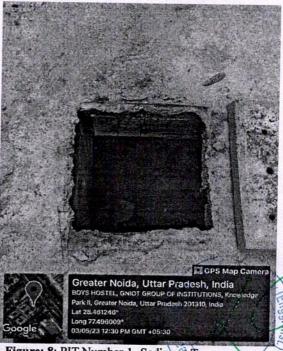


Figure: 8: PIT Number 1- Sediment Type Recharging (Open Lid)

(Approved by AICTE, Delhi & Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow)

♀ Plot No. 7, Knowledge Park-II, Greater Noida, Gautam Buddh Nagar, Uttar Pradesh-201310

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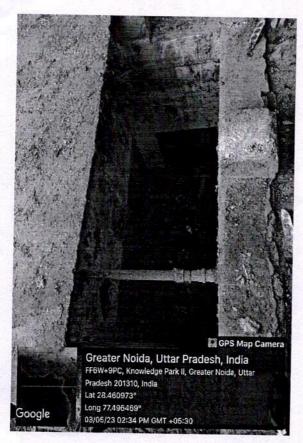


Figure: 8: PIT Number 7- Sediment Type Recharging (Open Lid)

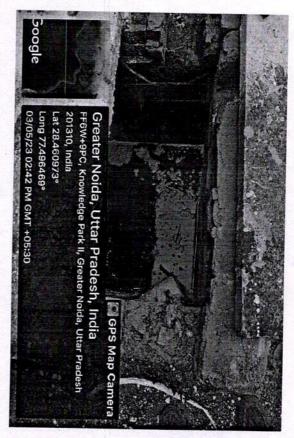


Figure: 9: PIT Number 8- Sediment Type Recharging (Open Lid)

Greater No

#### **RO Waste Water Harvesting**

Here in our institute Potable water is supplied to our employees, staff and students through state of the art Reverse osmosis (RO) systems deployed at various locations in our Institute. As we are aware about the working of reverse osmosis in which about 80% to 90% of the water get out in the form of very high TDS solution as waste, so it become necessary to harvest and conserve that water also. In this context we at Greater Noida Institute of Technology put great effort and means to harvest that water by utilizing it for our green campus lawn irrigation purpose and also proposing to re-direct the flow towards our rain water harvesting Pits.

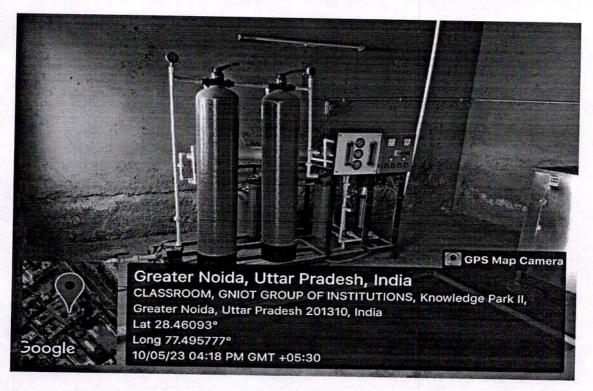


Figure: 10: RO Plant No.1. Main equipments

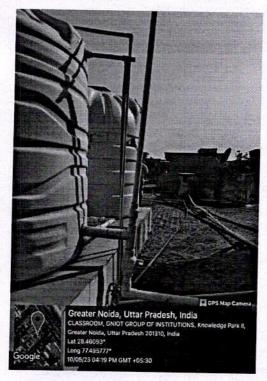


Figure: 11: RO Plant No.1. Waste water Storage Tank

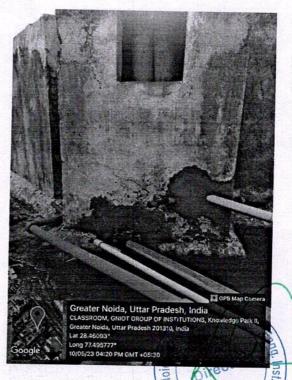


Figure: 12: RO Plant No.1. Waste water Drainage

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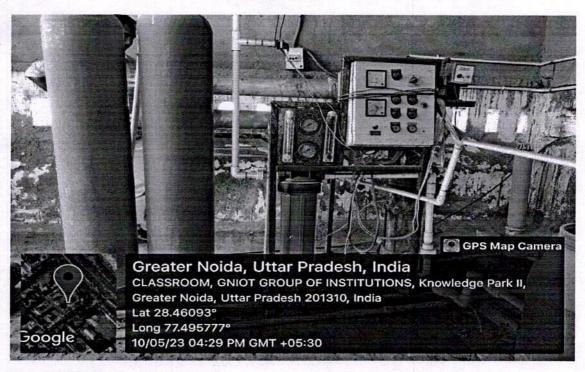


Figure: 13: RO Plant No.2. Main equipments

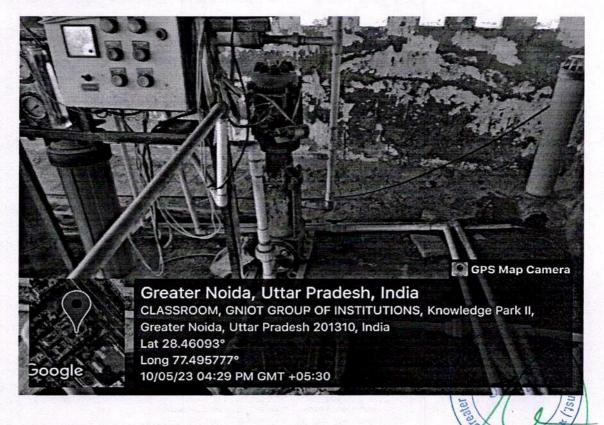


Figure: 14: RO Plant No.2. Drainage towards Lawns for irrigation.