I.T.S Engineering College
A unit of Durga Charitable Society
46, Knowledge Park-III, Greater Noida, Gautam Budh Nagar (U.P)-201310
Ph: +91 (0120) 2331000, Toll Free : 180018008040
E-mail: engg.gn@its.edu.in Website: www.itsengg.edu.in

Criterion 7	**Institutional Values and Best Practices**
Key Indicator 7.1	**Institutional Values and Social Responsibilities**
Metric 7.1.2	Environmental Consciousness and Sustainability and Divyangjan-friendly initiatives

S. No.	Water Conservation	Page Numbers
1	Rainwater Harvesting Project	2-11
2	Certificate of Rainwater Harvesting Project	12-13
3	Confirmation of Maintenance	14-15
4	Rainwater Harvesting Note 2022	16-20
5	Rainwater Harvesting Note 2023	21-31
6	Water Conservation Circulars	32-37
7	Photos of Water Conservation Measures	38-40

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RAINWATER HARVESTING PROJECT 2015-16

Sponsored by Asian Paints Ltd.

Under "Project Refill"

SURVEY REPORT

For

ITS DENTAL & ENGINEERING COLLEGE, GREATER NOIDA

PRESENTED TO ITS GROUP OF EDUCATION,

GREATER NOIDA

Forum for Organised Resource Conservation and Enhancement

For more information on FORCE visit our website: www.force.org.in

FORCE–C-8/8035, Vasant Kunj, New Delhi–110070.T: 11 46018754 M: 9899812888 email jyoti@force.org.in

Director
ITS Engineering College
Greater Noida

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ASIAN PAINTS PROJECT REFILL OBJECTIVE

Asian Paints has identified Water Conservation as a priority Corporate Social Responsibility area. For the Asian Paints unit in Kasna Village, Greater NOIDA, it has been decided to identify Water Conservation projects that benefit communities around the unit location.

In this context, FORCE had conducted a Pre-Project Feasibility study to assess the options for Asian Paints.

The objective of the CSR project to be done in Greater Noida in 2015-16 was:

1) To make a Rainwater Harvesting Plan and design Rainwater Harvesting structures for harvesting the runoff potential generated by the Institution.
2) To construct the Rainwater Harvesting structures in the Institution including:
    a. Channeling to transport water from catchment to the structures
3) To conduct a Water Conservation Awareness Workshop in the Institution.

To plan for a system that harvests maximum rainwater in minimum number of structures, a survey was done to understand the flow of rainwater runoff in your Institution. The rainwater drains originating from the rooftops were studied. Also the drains that carry the rainwater runoff out of the Institution building and the surface slopes were studied. The Institution staff also helped us in this process. As a result of this study, we were able to identify critical points where a significant amount of the rainwater runoff from the area could be harvested.

Director
ITS Engineering College
Greater Noida

MAP SHOWING TOTAL AREA OF ITS ENGINEERING:

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ITS Engineering College
Greater Noida

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RECHARGE POTENTIAL CALCULATION FOR TOTAL AREA:

ITS Engineering

Site No.	Land use break-up	Area (sq.m)	Annual Rainfall (m)	Hourly Rainfall (m)	Coeffic ients	Annual Runoff (cu.m/yr)	Hourly Runoff (cu.m/hr)
ITS Eng.	Roof top	13454.72	0.7	0.025	0.8	7534.643	269.0944
	Green	17722.11	0.7	0.025	0.2	2481.095	88.61055
	Paved	17572.17	0.7	0.025	0.6	7380.311	263.5826
	Total	48749				17396.05	621.2875

Details of Existing structure of ITS Engineering:

- 3 Circular Structure: 3m dia & 3m depth with recharge bore of 8" dia: Recharge potential of 51.2 cum each.
- 1 rectangular structure: 3m x3m x3m with bore of 8" dia: Recharge potential of 57cum

Total Recharge potential of existing rainwater harvesting structure 210.6 cum

The possibility of proposing more rain water harvesting structure is for 190.1 cum runoff.

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Greater Noida

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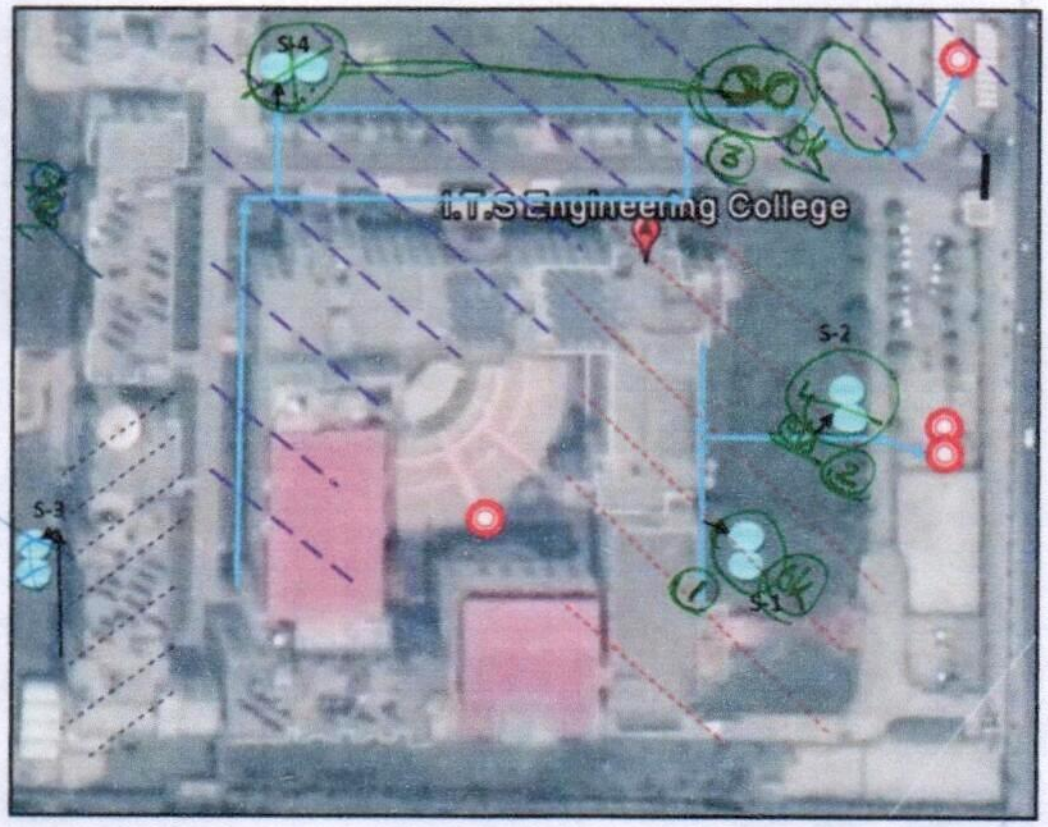
MAP SHOWING RECOMMENDED SITES FOR RAINWATER HARVESTING STRUCTURES AT ITS ENGINEERING



Structures proposed

Proposed Channelization

Catchment area 2

Catchment area 1

Catchment area 3

Existing rwh structure

Director
ITS Engineering College
Greater Noida

RECHARGE POTENTIAL CALCULATION

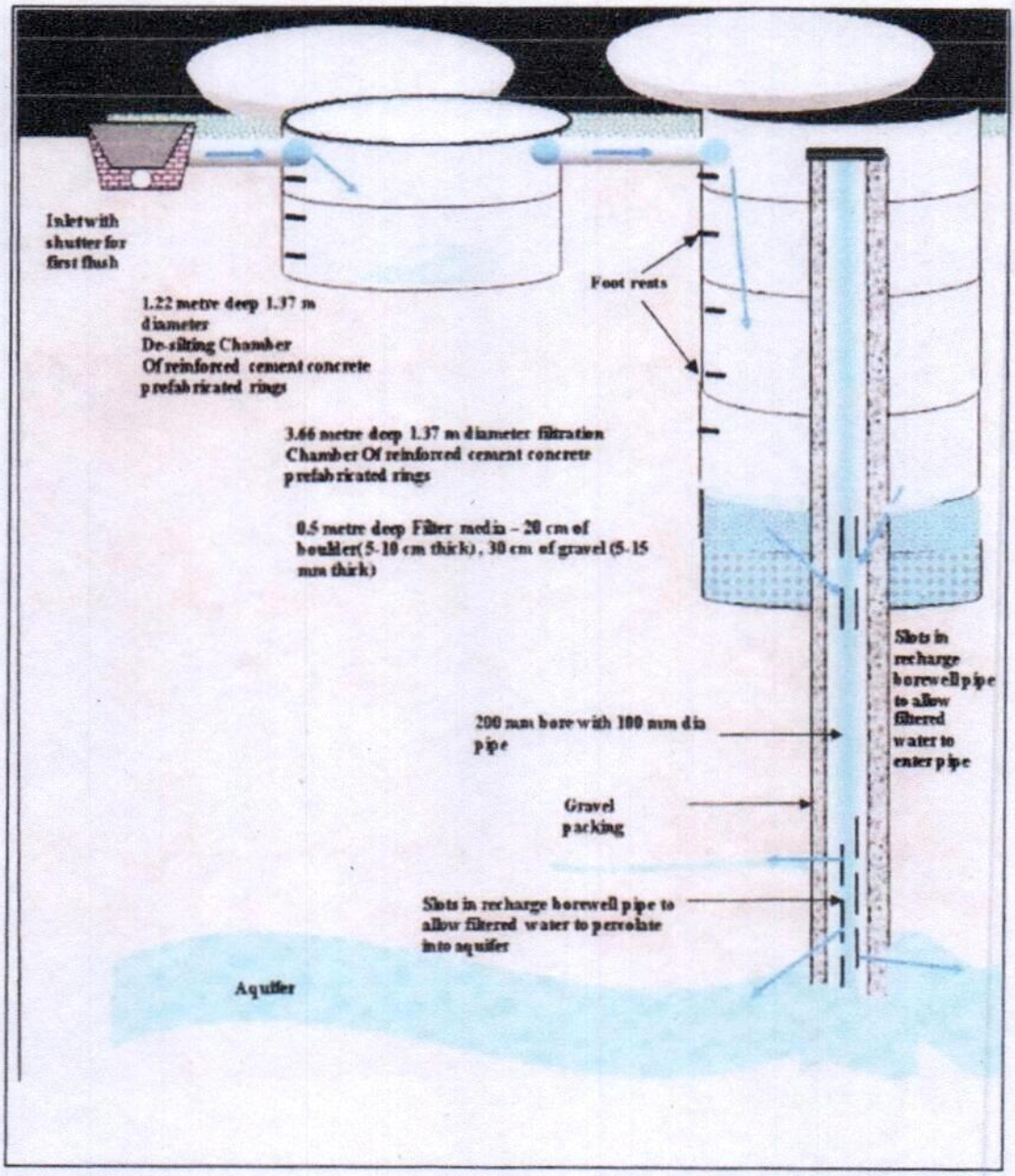
Site No.	Land use break-up	Area (sq.m)	Annual Rainfall (m)	Hourly Rainfall (m)	Coeffic ients	Annual Runoff (cu.m/yr)	Hourly Runoff (cu.m/hr)
S-1 & S-2	Rooftop	2358.9	0.7	0.025	0.8	1321	47.2
	Green	4345.6	0.7	0.025	0.2	608.38	21.7
	Paved	2916.4	0.7	0.025	0.6	1224.9	43.7
	Total	**9620.9**				**3154.3**	**112.7**
Already two structure exist for this catchment area of total capacity of approx 148 cum/hr							
Hostel (S-3)	Roof top	784.03	0.7	0.025	0.8	439.1	15.7
	Green	1178.5	0.7	0.025	0.2	165.0	5.9
	Paved	577.17	0.7	0.025	0.6	242.4	8.7
	Total	**2539.7**				**846.5**	**30.2**
S-4	Roof top	754.26	0.7	0.025	0.8	422.4	15.1
	Green	10097.37	0.7	0.025	0.2	1413.6	50.5
	Paved	1717.04	0.7	0.025	0.6	721.2	25.8
	Total	**12568.67**				**2557.2**	**91.3**

DETAILS OF RECHARGE STRUCTURES PROPOSED:

Site	Location	Channelization details (pipe length & dia)
1	In green area front of main college building	10m & 6" & 1 shutter
2	In green area front of Management building	20 m channelization with 2 manhole & 1 shutter
3	Green of opp. Hostel	40m & 6" with 4 manholes & 1 shutter
4	Green area adjacent to Mandir	10m & 6" & 1 shutter

Director
ITS Engineering College
Greater Noida

DESIGN OF STRUCTURE PROPOSED



Director
ITS Engineering College
Greater Noida

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About FORCE

Forum for Organised Resource Conservation and Enhancement is a Delhi based NGO registered under the Societes Act of 1860. FORCE is FCRA Certified, 80G certified and registered under section 12A of Income Tax Act, 1961.

Our focus area is WATER.

Our Vision: To make communities "Water Secure"

Our mission: To help create productive, responsible partnerships that use traditional wisdom, modern technology and participative governance for holistic solutions to Save Water, Share Water.

FORCE adopts a unique '4 WAY PARTNERSHIP'**(P-4)**approach. It partners with government and local leaders, communities, funding partners and technical experts to offer end-to-end support to citizen groups for adopting water conservation and sanitation practices. From research studies/seminars to creating awareness/interest and finally implementation, FORCE uses this model to empower communities and to cover the entire spectrum of activities related to water conservation and sanitation. We also share our learning with relevant government departments to help make existing water policies more people and water friendly.

FORCE has received awards and recognition such as in National Urban Water Award (Ministry of Urban Development) at various levels. The P-4 Partnership approach has also enabled us to create a 'Ripple Effect' – an ever expanding circle of impact on mass awareness and adoption of water conservation practices and sustainable sanitation.

FOR ANY MORE INFORMATION OR ANY HELP PLEASE CONTACT

Asian Paints – FORCE Rainwater Harvesting Project Co-ordinator

FORCE

C-8/8035, Vasant Kunj, New Delhi.

Ph: 011 46018754

Email: force@force.org.in

Happy Rainwater Harvesting!

Director
ITS Engineering College
Greater Noida

ITS ENGINEERING LAYOUT MAP SHOWING CATCHMENT AREA FOR PROPOSING THE RAIN WATER HARVSETING STRUCTURE

Structures proposed

Catchment area

Proposed Channelization

Director
ITS Engineering College
Greater Noida

2

RECHARGE POTENTIAL CALCULATION

Site No.	Land use break-up	Area (sq.m)	Annual Rainfall (m)	Hourly Rainfall (m)	Coeffic ients	Annual Runoff (cu.m/yr)	Hourly Runoff (cu.m/hr)
A Block	Roof top	784.03	0.7	0.025	0.8	439.06	15.7
	Green	1178.5	0.7	0.025	0.2	164.9	5.9
	Paved	577.17	0.7	0.025	0.6	242.4	8.7
	Total	2539.7				846.4	30.3

DETAILS OF RECHARGE STRUCTURES PROPOSED:

Site	Location	Channelization details (pipe length & dia)
1	In green area front of main college building	40m & 6" with 4 manholes & 1 shutter ***Note: 6m road cutting would be also suggested for channelization***

Director
ITS Engineering College
Greater Noida

CERTIFICATE OF COMPLETION OF RAINWATER HARVESTING PROJECT BY ASIAN PAINTS

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The Principle,
ITS ENGINEERING COLLEGE
Greater Noida,
Uttar Pradesh.

FEB 2016

Dear Sir/Madame,

Namaskar. It gives me great pleasure to congratulate you on having successfully completed the 'Asian paints – FORCE Rainwater Harvesting project' in your institution.

The project is now being handed over to you. ITS ENGINEERING COLLEGE, Greater Noida will now take care of maintenance and upkeep of the facilities created so that the children continue to benefit from them. The maintenance work includes a minimal charges for labour & it's a manual process which takes around 4-5 hrs to clean one structure.

The works conducted as a part of this project that is sponsored by Asian Paints are:

1) Design and implementation of 3 no. Rainwater Harvesting Structures in the institution premises having a total annual recharge potential of2306.8cu.m / yr.
2) Child Protection features in each system. This includes use of closed reinforced concrete cement covers.
3) Installation of 1 nos 3ft X 4 ft signboard explaining the project features and installation of 3 nos 1ft X 1.5ft marker signboards at each site.
4) The Bore wells made for rainwater harvesting and recharging at your site should not be used for extraction of groundwater in future.
5) In case of any damage to structure, institute authority should inform FORCE and Asian Paints immediately.

Director
ITS Engineering College
Greater Noida

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To ensure that your rainwater harvesting system continues to perform optimally, please find enclosed a Rainwater Harvesting Maintenance Manual that shares with you the details of your rainwater harvesting system and what you need to do to maintain it.

We thank you for your gracious support during the implementation of the project.

We also request you to ensure the following for a period of at least 5 years from handing over of project.

1) That the educational signboard put up as a part of this project is always visible on site.
2) That visiting personnel from Asian Paints are allowed to visit the site.
3) That the Rainwater harvesting system is not demolished and is kept functional through regular maintenance.
4) Those apart from the safety measures taken as a part of the project, the school will also take measures to ensure that no mishap occurs.

Once again, on behalf of FORCE and of the generous sponsors of the project – Asian Paints Ltd, we congratulate you on your noble initiative. We are happy to hand over the completed structure to the institute. Kindly sign (with stamp) in the space indicated below to indicate your acceptance of the same.

Thanks and regards

Sanjiv Sharma

Director (Projects), FORCE

Ph: 8745017933

www.force.org.in

For – Institute Authority

16.3.2016

Name: KISHAN SINGH

Designation: Administrator

Institute Name: ITS Engineering College Gr. Noida

Director
ITS Engineering College
Greater Noida

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To,

The Program Manager,
FORCE

SUB: CONFIRMATION OF MAINTENANCE

This is to confirm that the routine maintenance of the Rainwater Harvesting Structure at ITS Engineering college sponsored by Asian Paints Ltd, Kasna has been completed by Forum For Organised Resource Conservation and Enhancement (FORCE).

We would like to thanks Asian Paints Ltd. Kasna for their support for rainwater harvesting maintenance.

Regards,

Name and Sign & stamp of authority:
Date: 25/11/2016

Director
ITS Engineering College
Greater Noida

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To,

The Program Manager,
FORCE

SUB: CONFIRMATION OF MAINTENANCE

This is to confirm that the routine maintenance of the Rainwater Harvesting Structure at ITS Engg College Greater Noida sponsored by Asian Paints Ltd., Kasna has been completed by Forum For Organised Resource Conservation and Enhancement (FORCE).

We would like to thanks Asian Paints Ltd. Kasna for their support for rainwater harvesting maintenance.

Regards,

Name and Sign & stamp of authority:
Date: 30/10/2020

Director
ITS Engineering College
Greater Noida

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Dated : 29-Jun-2022

NOTE

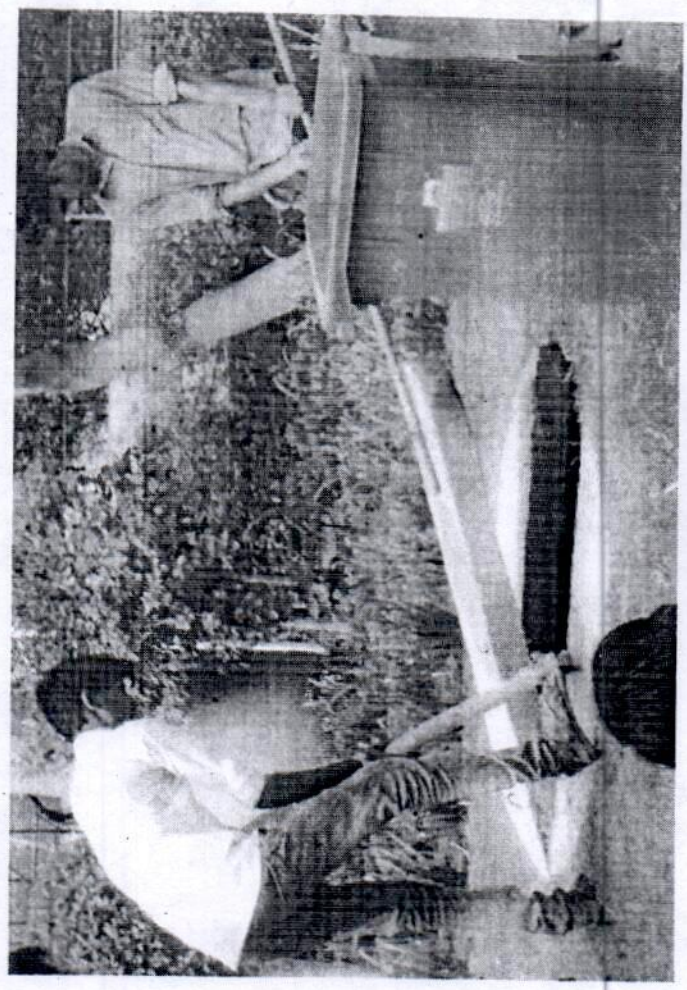
Rainwater Harvesting is **one of the most commonly used methods to save water**. It refers to storing of rainwater for various uses. The notion behind rainwater harvesting is to not waste the rainwater and prevent it from running off. In other words, it is done to collect rainwater using simple mechanisms. We have various rain water harvesting tanks in which we collect rain water to recharge the ground water level. So it is also our moral responsibility to clean our rainwater harvesting system regularly, therefore in this series today on dated 29th June 2022 we have completed the task of cleaning our rainwater harvesting system.

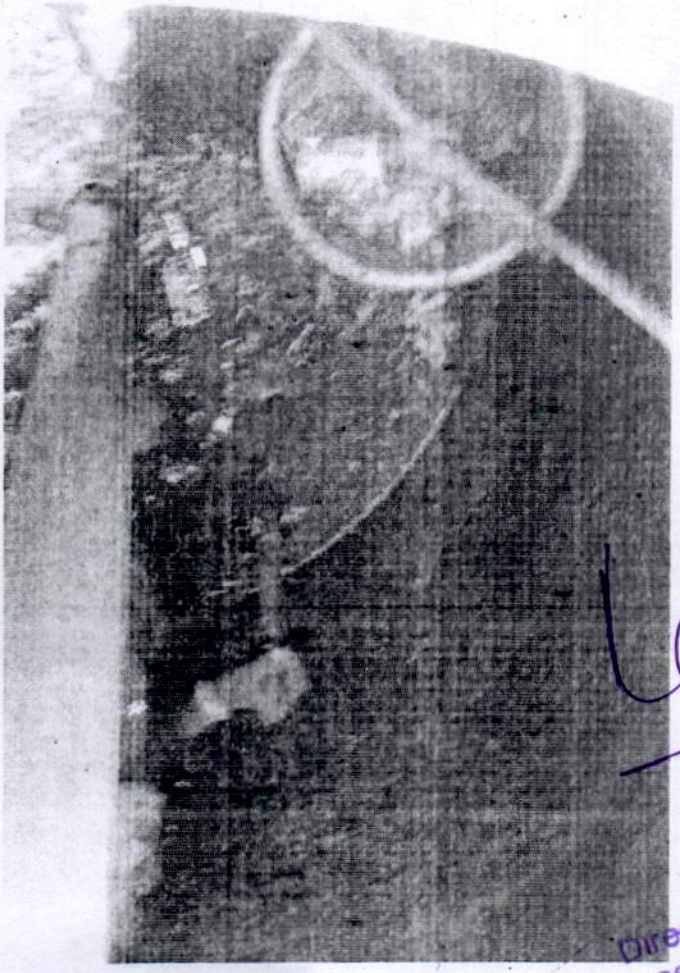
Actually this process was started since last 15 days from the college building's roof top area, in which we had cleaned the roof top surface and rain water pipes. After that we cleaned the drains and finally today we have cleaned all the rainwater harvesting pits and its connection pipes. In this process, we have also cleared a lot of garbage from drains etc., sludge and garbage deposited in rain water harvesting pits etc., the photographs of the same are being enclosed with this report for future reference.

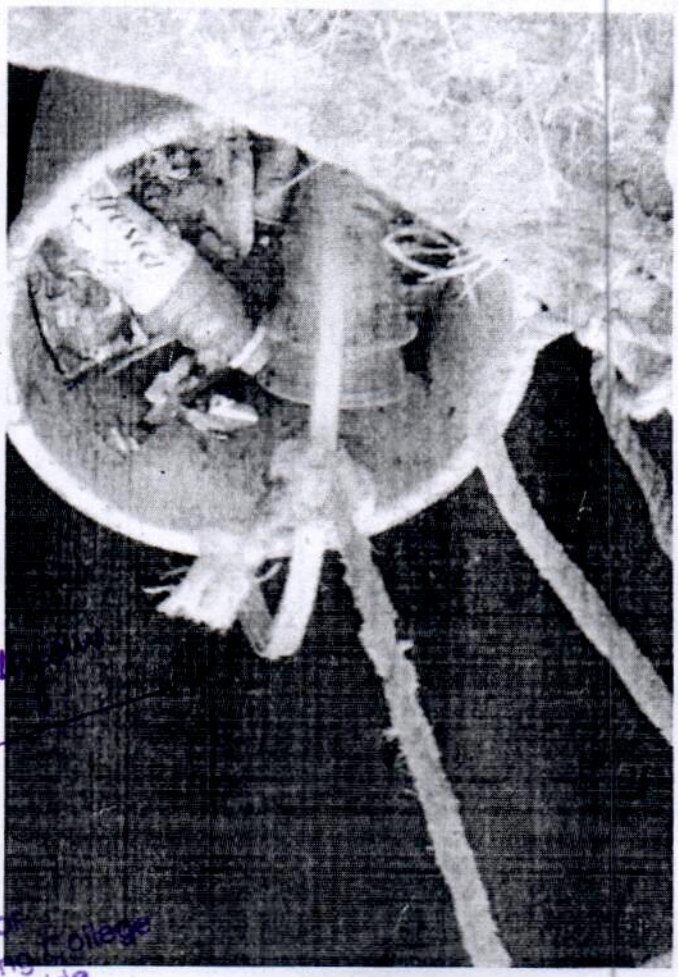
29/6/22

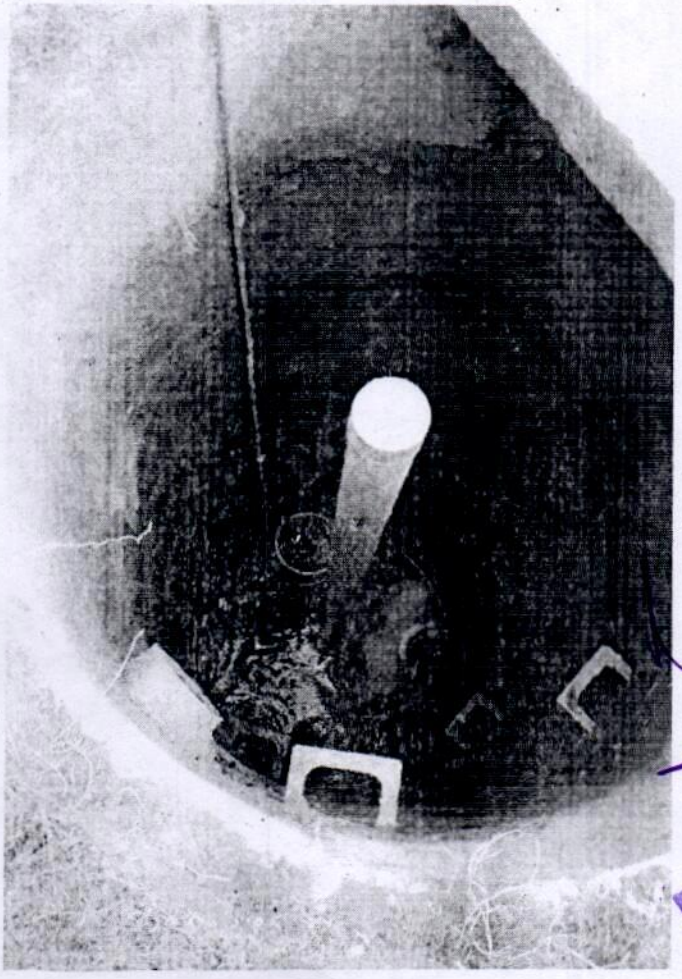
(Vinod Chand)
Administrator
ITS Engineering College, Greater Noida

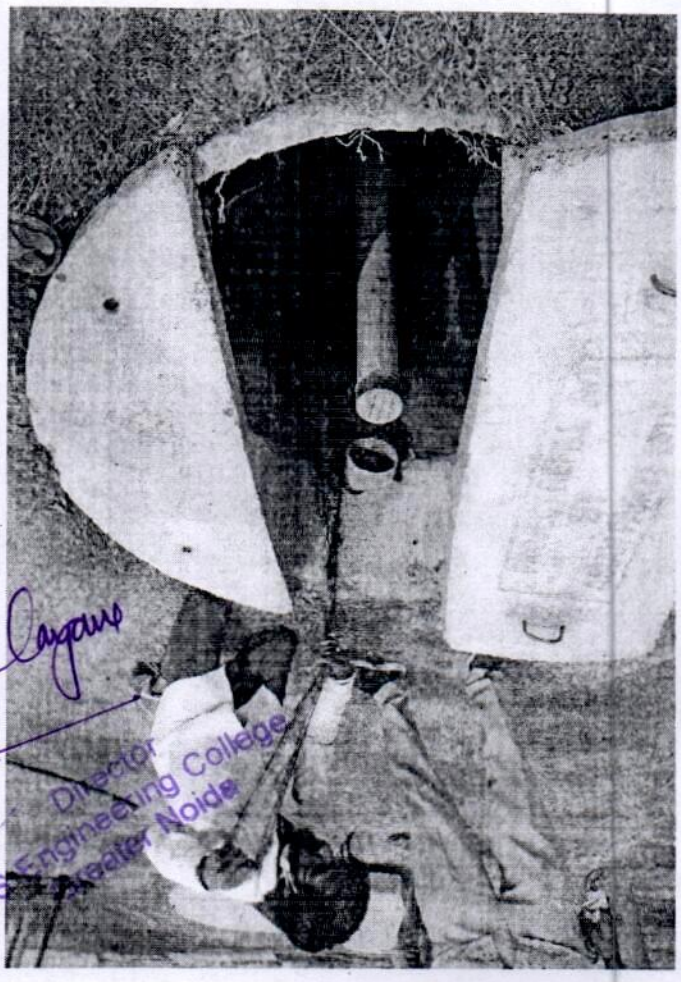
Director
ITS Engineering College
Greater Noida











Director
ITS Engineering College
Greater Noida

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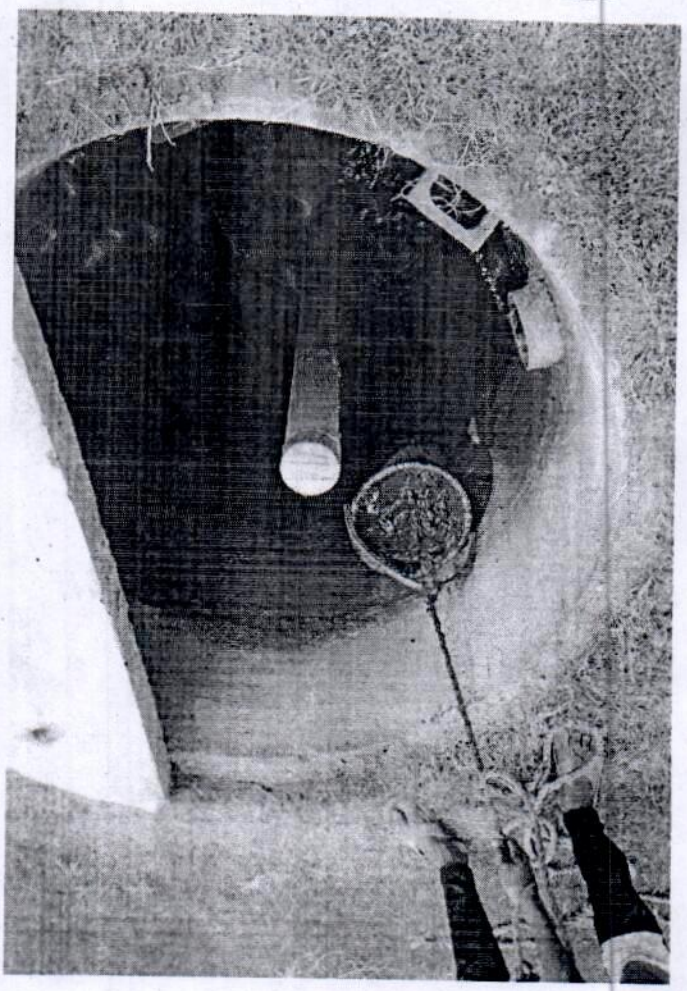
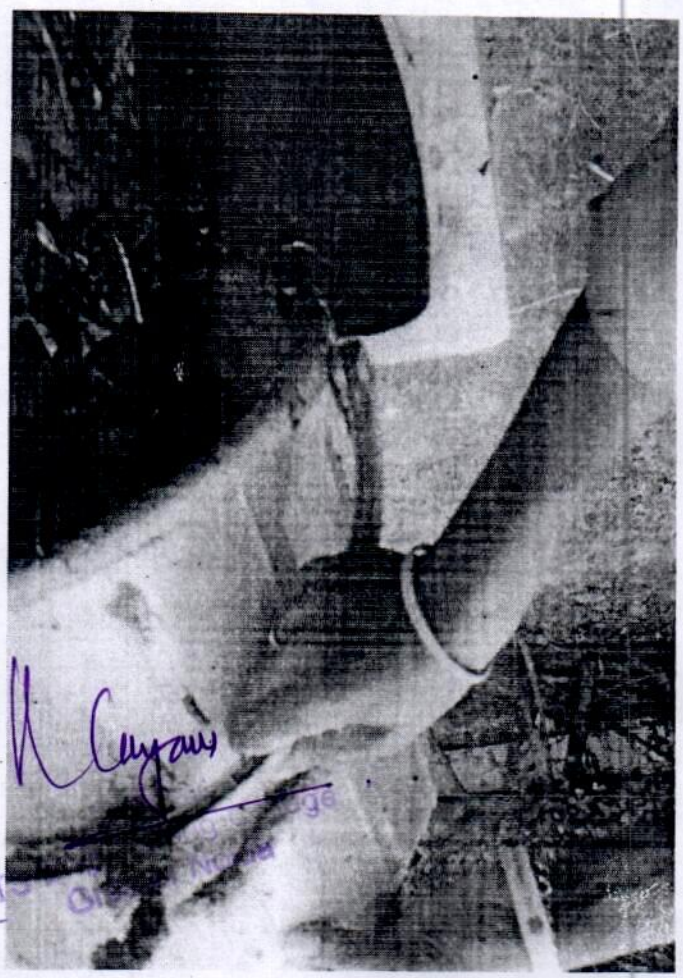
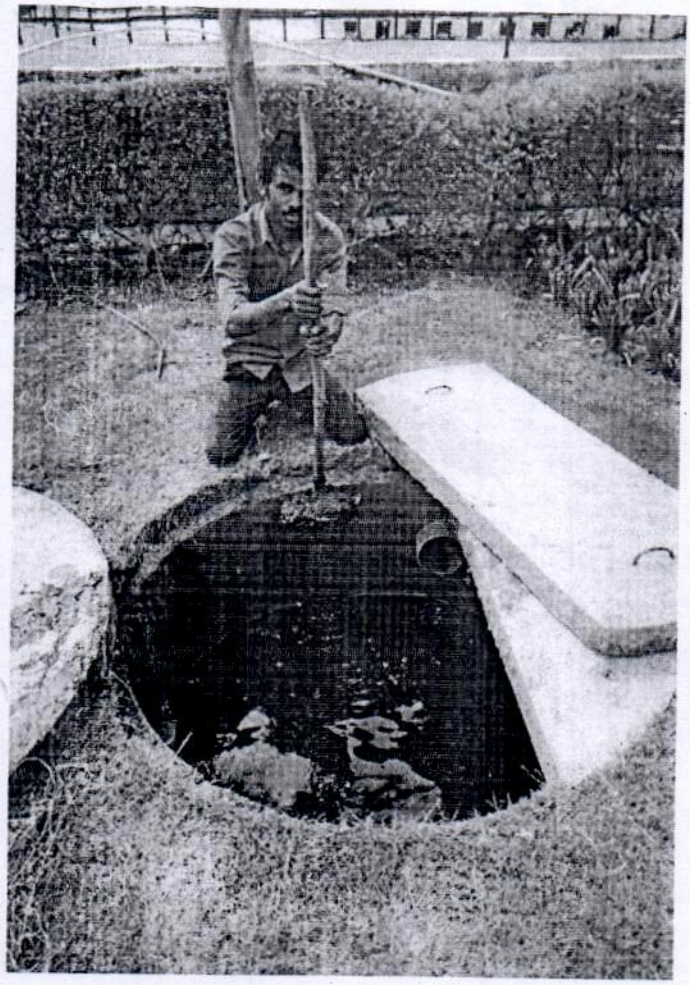
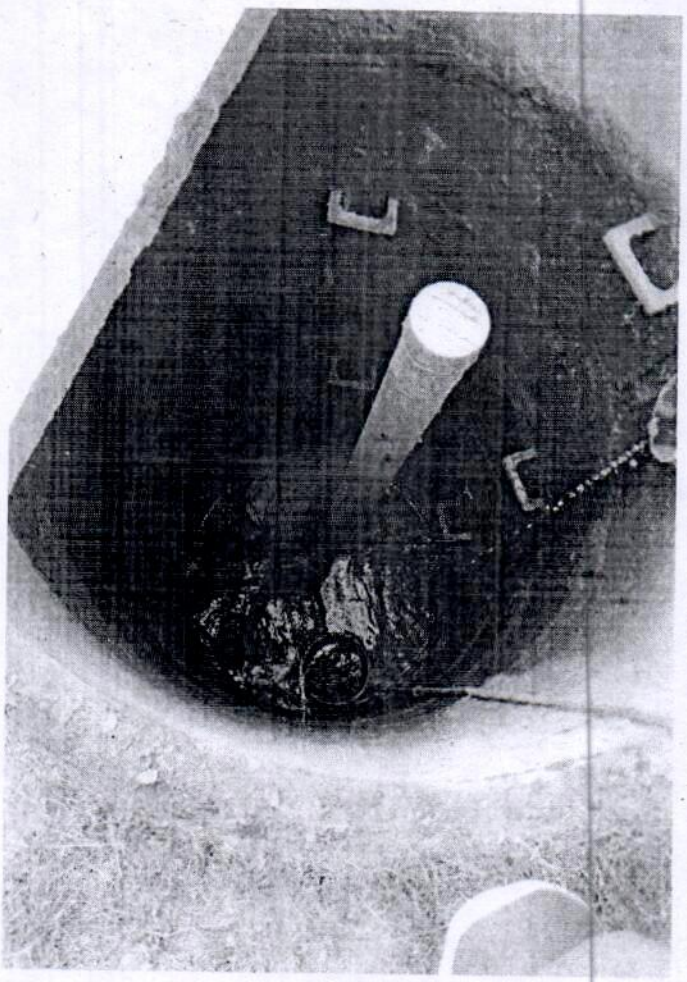








Director
ITS Engineering College
Greater Noida

Dated : 19-Jun-2023

NOTE

Rainwater Harvesting is **one of the most commonly used methods to save water**. It refers to storing of rainwater for various uses. The notion behind rainwater harvesting is to not waste the rainwater and prevent it from running off. In other words, it is done to collect rainwater using simple mechanisms. We have various rain water harvesting tanks in which we collect rain water to recharge the ground water level. So it is our moral responsibility to clean our rainwater harvesting system regularly, therefore in this series today on dated 19-Jun-2023 we have completed the task of cleaning our rainwater harvesting system.

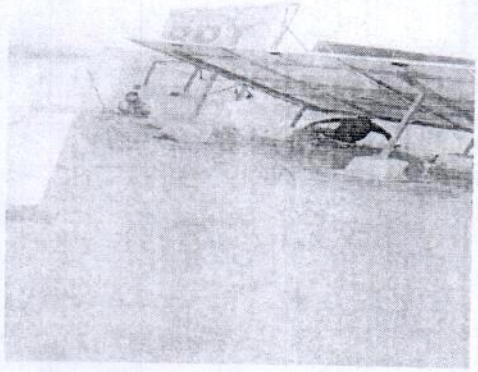
Actually this process was started since last 15 days from the college building's (i.e. Academic Building of Engineering College, CPS, Arjun, Dhruv and Sawarkar Hall and Staff flats etc.) roof top area, in which we had cleaned the roof top surface and rain water pipes. After that we cleaned the drains and finally today we have cleaned all the rainwater harvesting pits and its connection pipes. In this process, we have also cleared a lot of garbage from drains etc., sludge and garbage deposited in rainwater harvesting pits etc., the photographs of the same are being enclosed with this report for future reference.

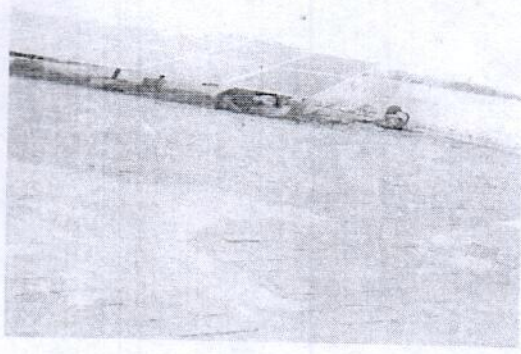
Director Sir

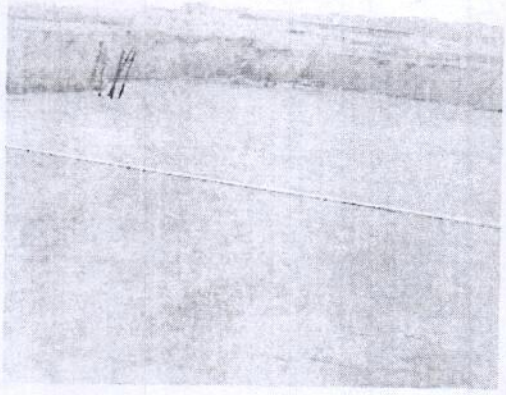
(Vinod Chand)
Administrator
ITS Engineering College, Greater Noida

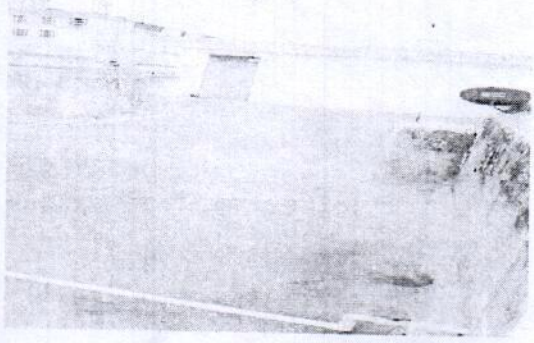
Director
ITS Engineering College
Greater Noida

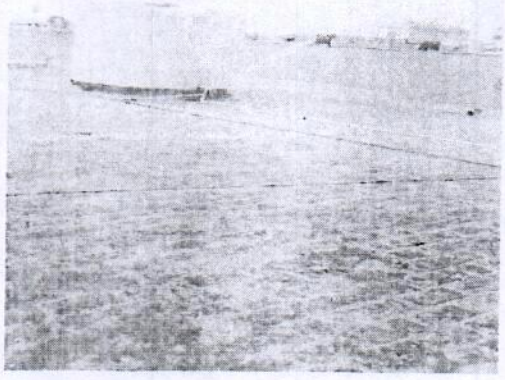
(37)

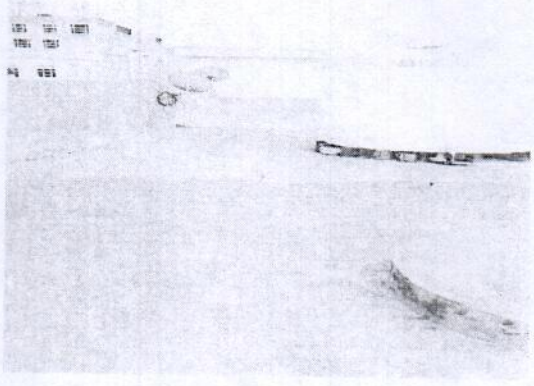


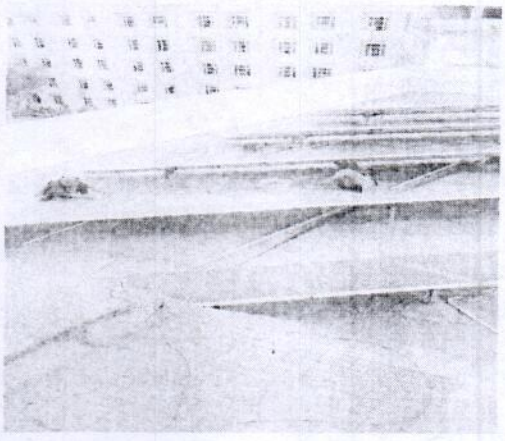


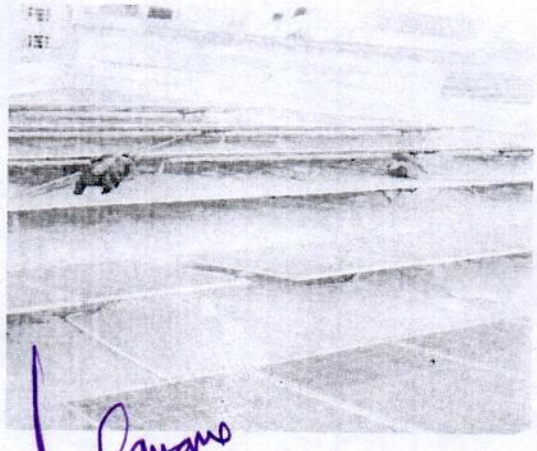












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ITS Engineering College
Greater Noida

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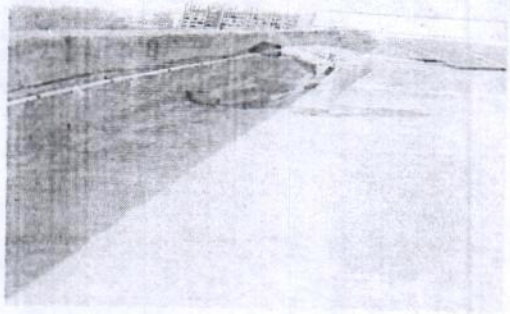

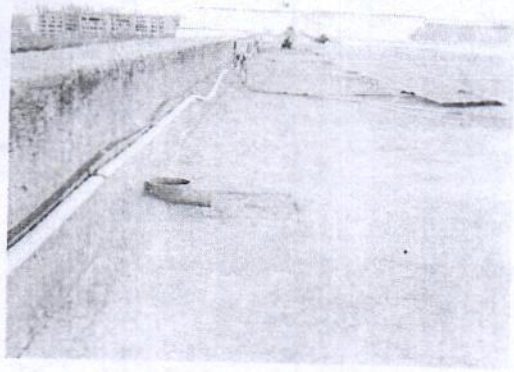

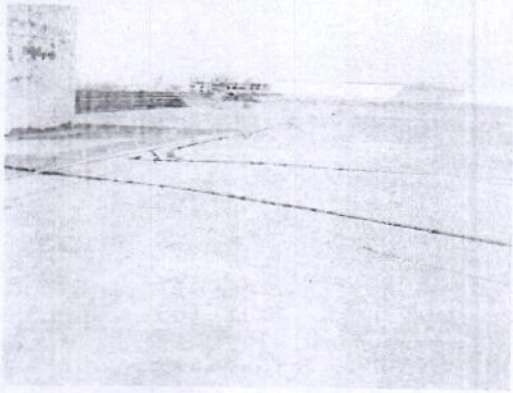

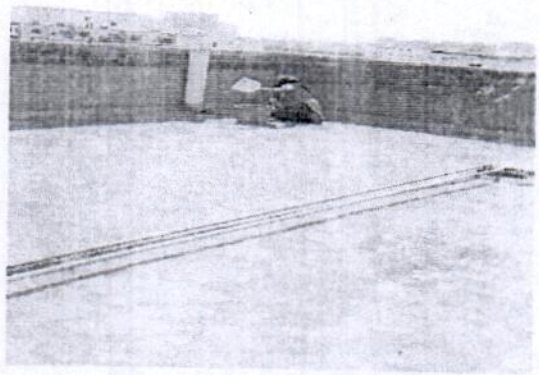

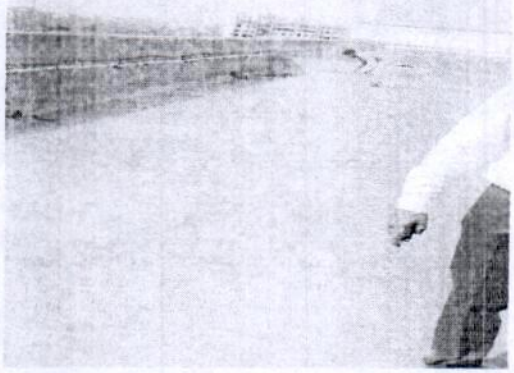

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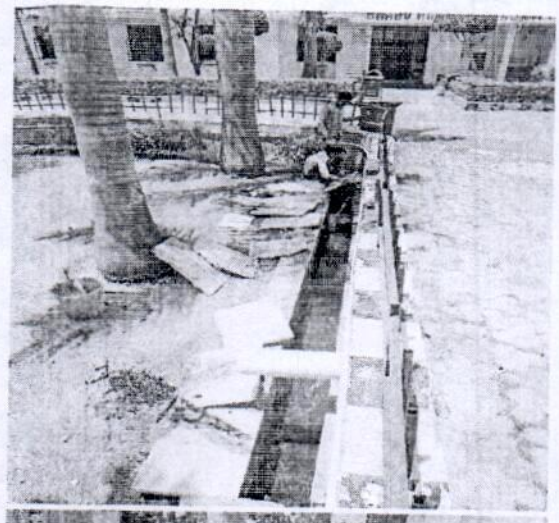
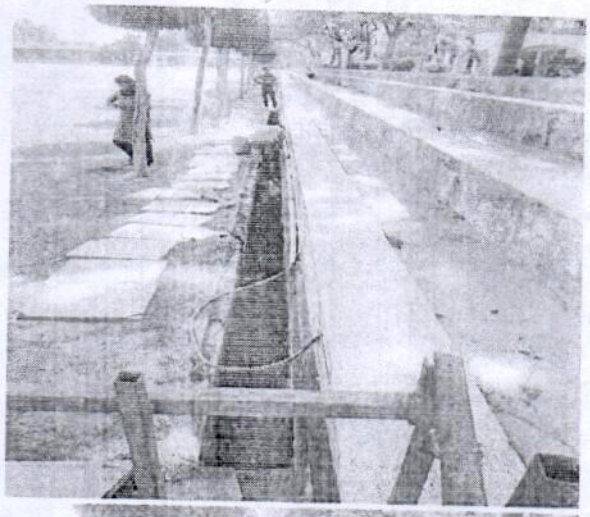
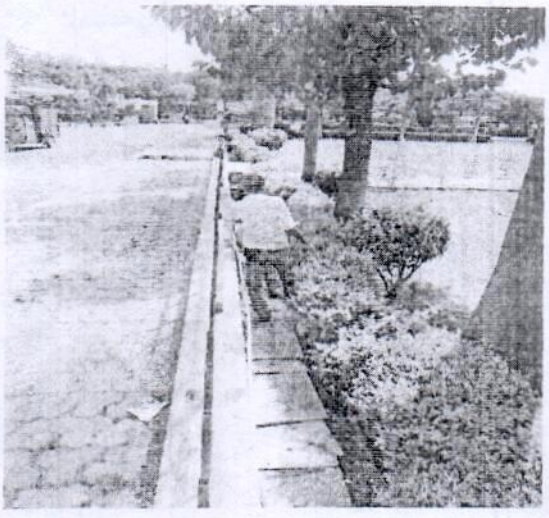
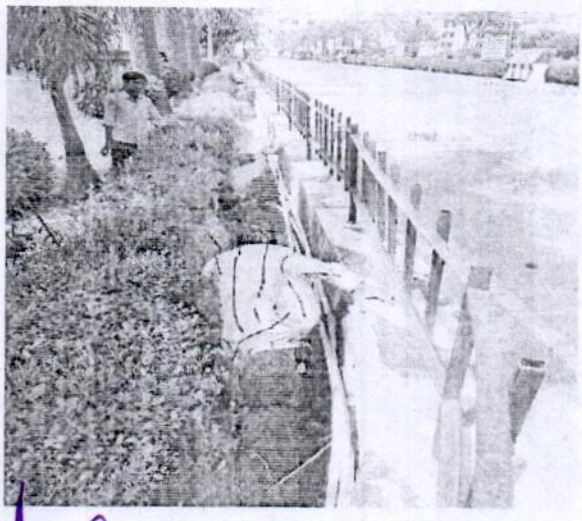
ITS Engineering College
Greater Noida

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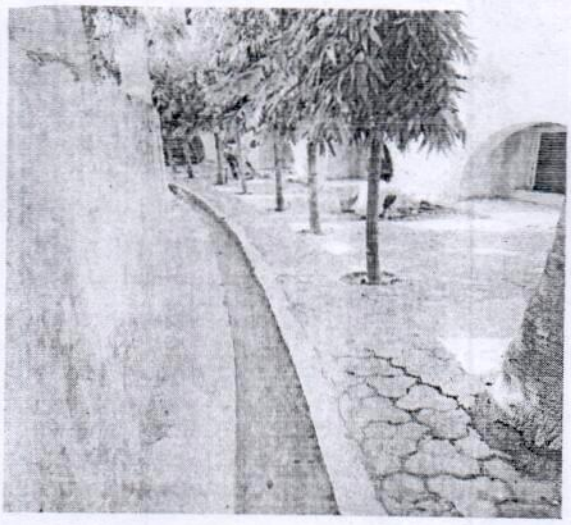
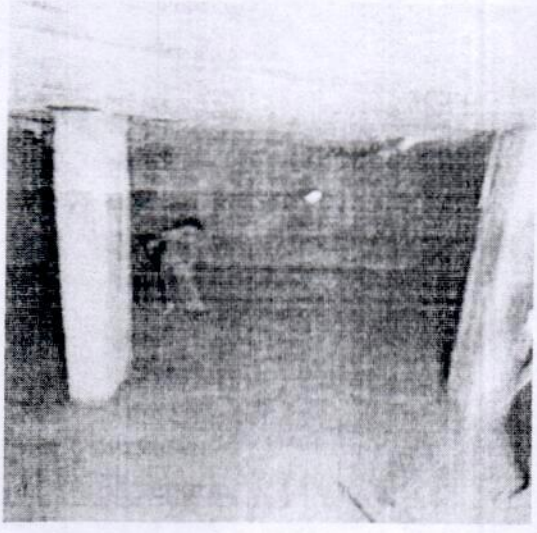
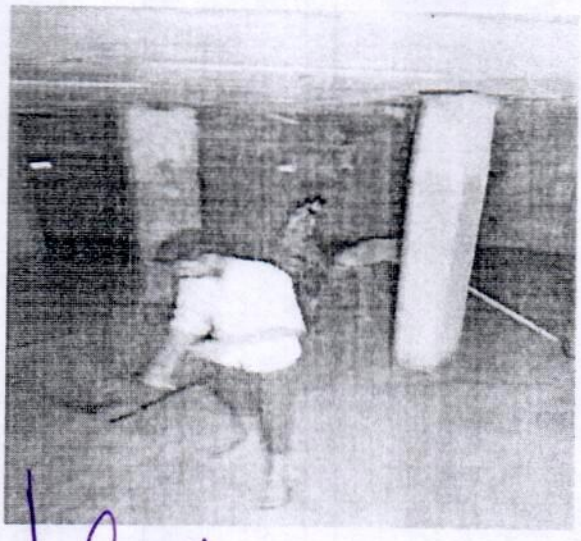
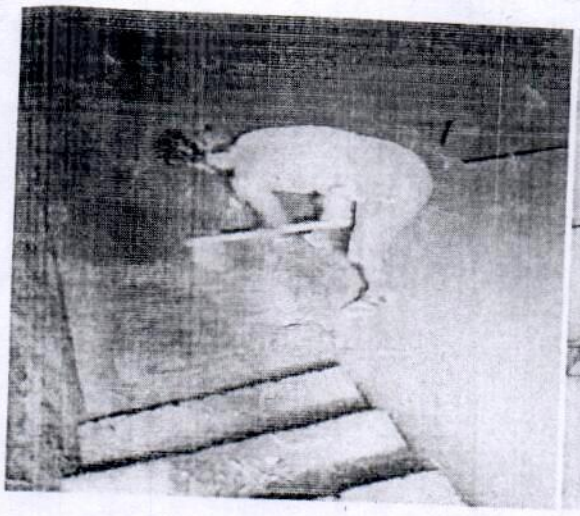
ITS Engineering College
Greater Noida

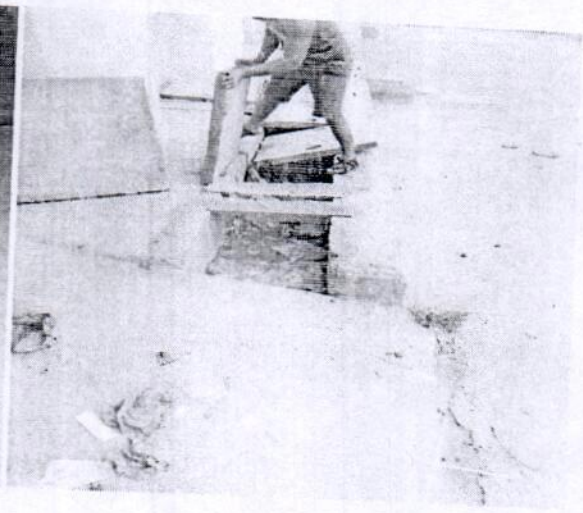


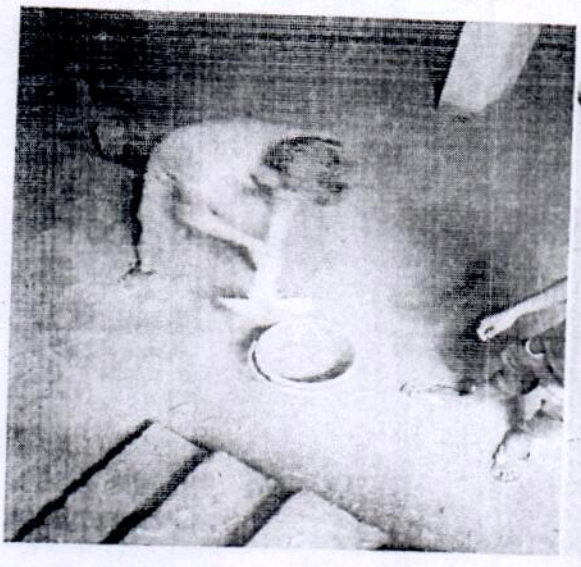


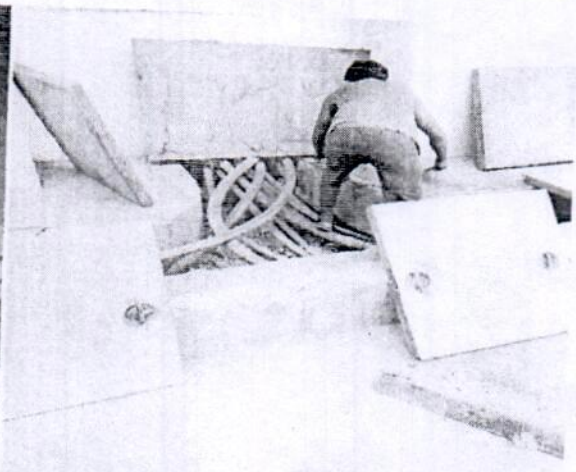


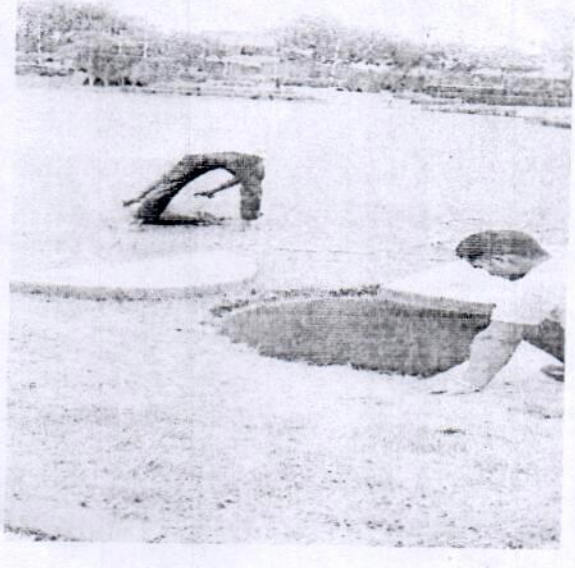
Director
ITS Engineering College
Greater Noida











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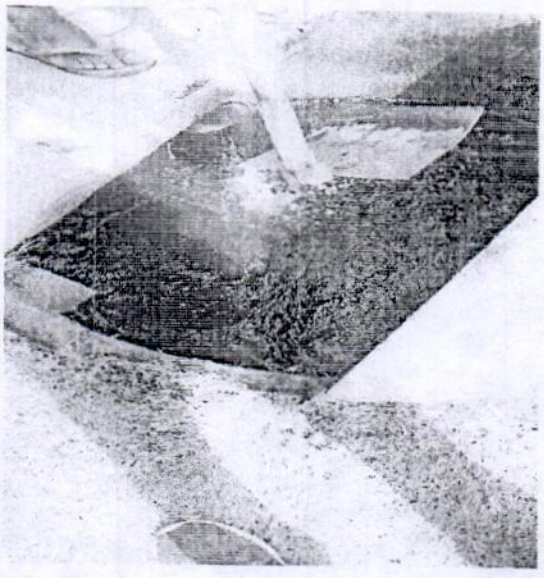

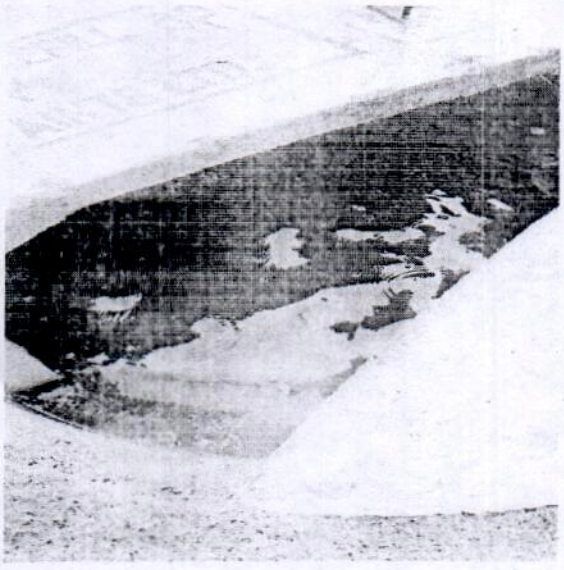

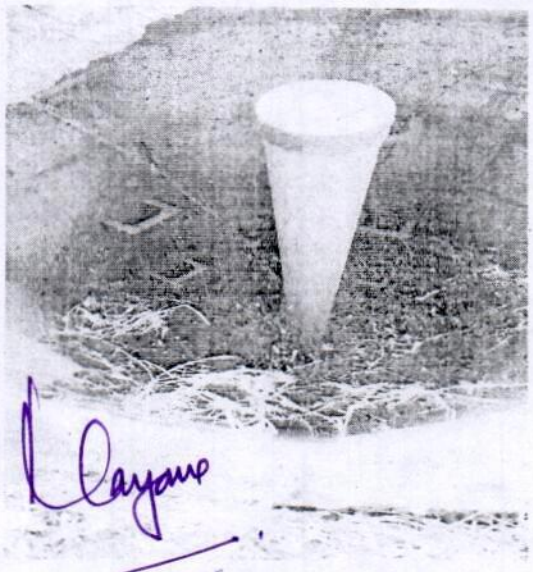

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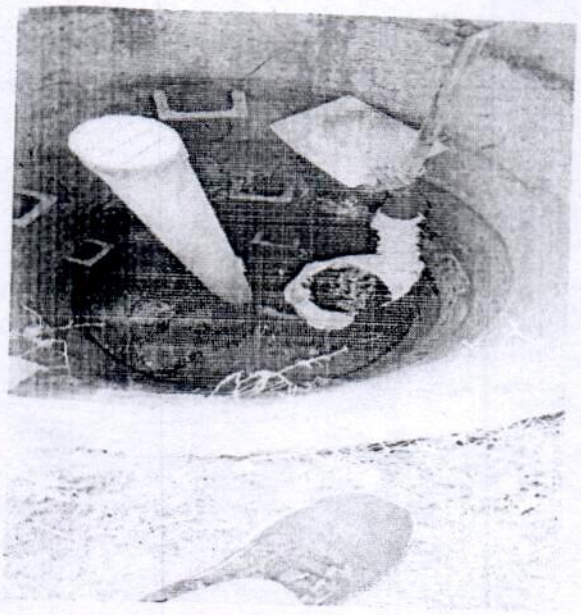

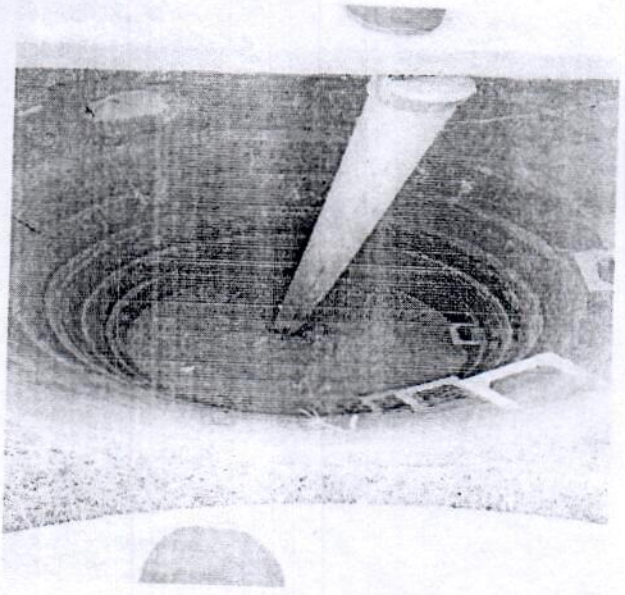

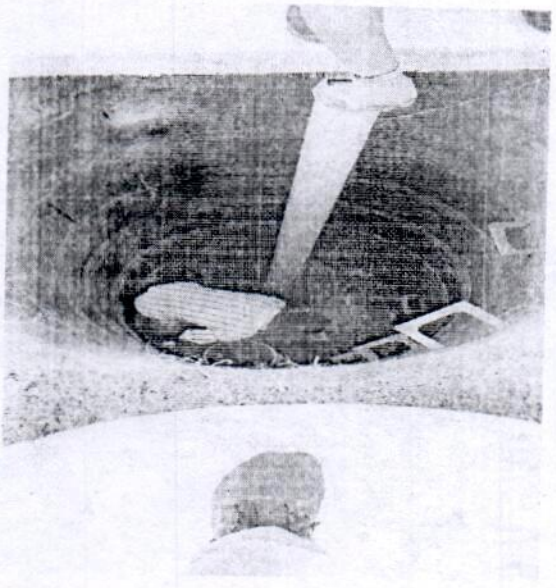

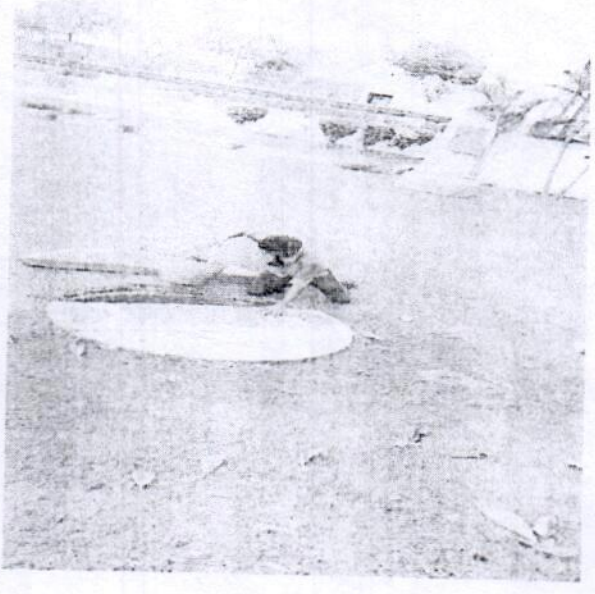

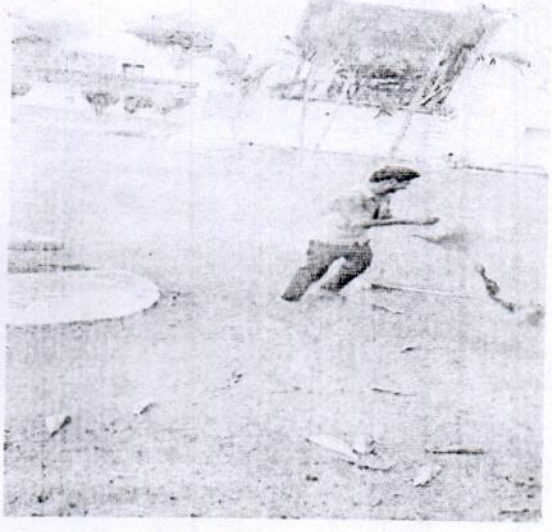

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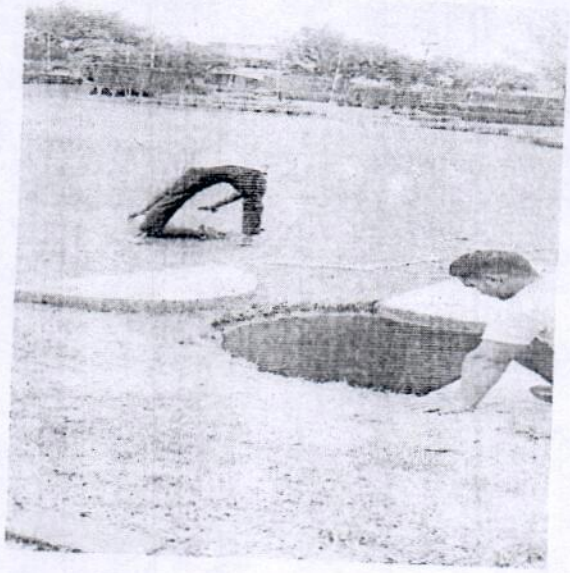
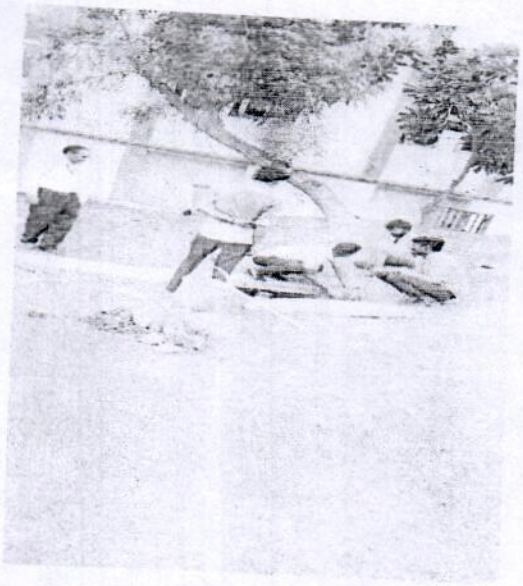
(30)





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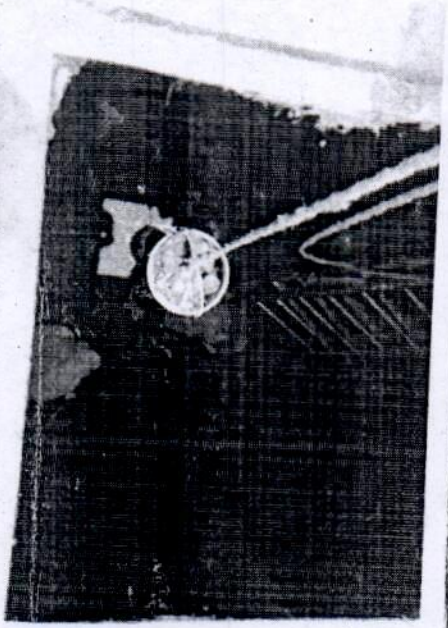
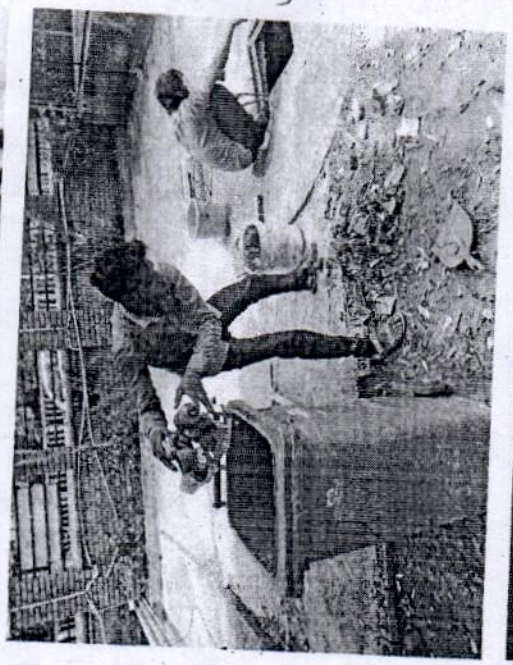
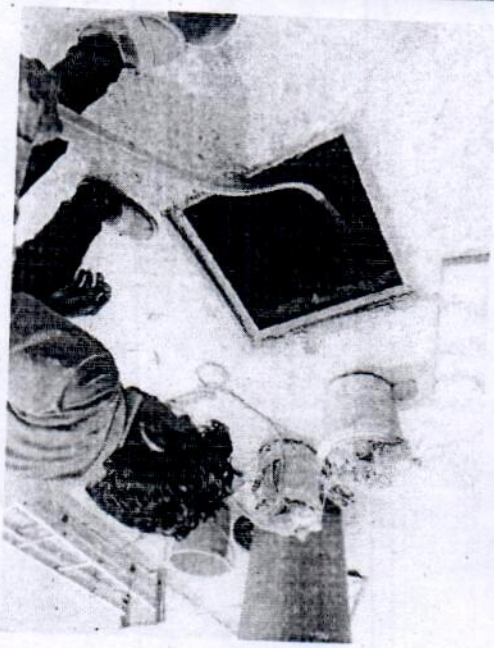
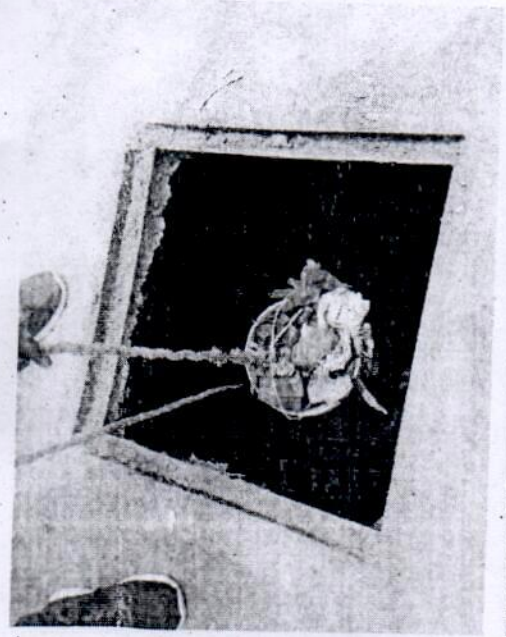
ITS Engineering College
Greater Noida

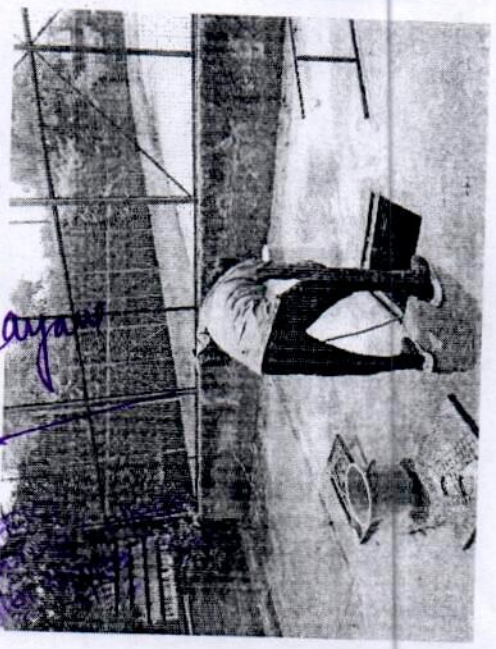
Rain Water Harvesting Pits located in the main gate parking area have been completely cleared on 04/7/22.

(29)





Director
ITS Engineering College
Greater Noida

Rain water Harvesting pit and connected GT's of the Amphitheater area have been throughly cleaned on 03/7/2022.

The Education Group
Ghaziabad • Greater Noida
(Estd.: 1995)

I.T.S Engineering College

(NAAC ACCREDITED)
46, Knowledge Park-III, Greater Noida, Gautam Budh Nagar (U.P.) - 201310
Ph : 91(0120) 2331000, Fax : (0120) 2331037
E-mail: engg.gn@its.edu.in Website : www.itsengg.edu.in

Date: 5th May, 2022

CIRCULAR

Water Conservation

All the faculty members, staff members and students are hereby advised to avoid unnecessary wastage of water in the campus. Your sincere cooperation towards this cause would benefit everyone around.

05/05/2022

Dr. Sanjay Yadav
(Dean, Student Affairs)

CC to:

The Director for his kind information

Heads of the various Departments for internal circulation among the students and faculty members

College Notice Board

Director
I.T.S. Engineering College
Greater Noida

Approved by A.I.C.T.E., Govt. of India and Affiliated to Dr. A.P.J. Abdul Kalam Technical University Lucknow, Uttar Pradesh

I.T.S Engineering College
(NAAC ACCREDITED)
The Education Group
Ghaziabad • Greater Noida
(Estd.: 1995)
46, Knowledge Park-III, Greater Noida, Gautam Budh Nagar (U.P.)
Ph : 91(0120) 2331000, Fax : (0120) 2331037
Email: engg.gn@its.edu.in, Website : http://www.its.edu.in

Date: 19th March, 2021

CIRCULAR

Water Conservation

All the faculty members, staff members and students are informed to join the College campaign to conserve water for the future generation. Your sincere cooperation towards this cause would benefit everyone around.

19/03/2021

Dr. Sanjay Yadav
(Dean Student's Welfare)

CC to:

The Director for his kind information

Heads of the various Departments for internal circulation among the students and faculty members

College Notice Board

Director
I.T.S. Engineering College
Greater Noida

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Ph : 91(0120) 2331000, Fax : (0120) 2331037
Email: engg.gn@its.edu.in, Website : http://www.its.edu.in

Date: 4th September, 2020

CIRCULAR

Water Conservation

Water is life and one of the most important reasons for our survival. Keeping this fact in our mind, it is to advise every faculty and staff members that the Institute is taking every possible step to conserve water for the future generation. To uphold this social cause, you all are expected to contribute significantly towards water conservation.

04/09/2020

Dr. Sanjay Yadav
(Dean Student's Welfare)

CC to:

The Director for his kind information

Heads of the various Departments for internal circulation among the students and faculty members

College Notice Board

Director
I.T.S. Engineering College
Greater Noida

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Ph : 91(0120) 2331000, Fax : (0120) 2331037
Email: engg.gn@its.edu.in, Website : http://www.its.edu.in

Date: August 23, 2019

CIRCULAR

Water Conservation

All the faculty and staff members and students are advised to refrain from misusing water inside the building and premises. In case, you report any misuse of water by anyone, kindly inform the office of the undersigned. All measures would be taken by the higher authority in this campaign.

23/08/2019

Dr. Sanjay Yadav
(Dean Student's Welfare)

CC to:

The Director for his kind information

Heads of the various Departments for internal circulation among the students and faculty members

College Notice Board

Director
I.T.S. Engineering College
Greater Noida

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Ghaziabad • Greater Noida
(Estd.. 1995)

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46, Knowledge Park-III, Greater Noida, Gautam Budh Nagar (U.P.)
Ph : 91(0120) 2331000, Fax : (0120) 2331037
Email: engg.gn@its.edu.in, Website : http://www.its.edu.in

Date: 22/09/2018

CIRCULAR

Water Conservation

All the faculty members, staff members and students are advised to minimize the unnecessary use of water in the campus. They must understand that water is a priceless resource and hence, must be used wisely.

22/09/18

Dr. Sanjay Yadav
(Dean Student's Welfare)

CC to:

The Director for his kind information

Heads of the various Departments for internal circulation among the students and faculty members

College Notice Board

Director
I.T.S. Engineering College
Greater Noida

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46, Knowledge Park-III, Greater Noida, Gautam Budh Nagar (U.P.)
Ph : 91(0120) 2331000, Fax : (0120) 2331037
Email: engg.gn@its.edu.in, Website : http://www.its.edu.in

Date: 7th May, 2017

CIRCULAR

Water Conservation

All the faculty and staff members are hereby informed that the Institute is taking every possible step to conserve water for the future generation. To uphold this social cause, you all are expected to contribute significantly towards water conservation.

07/05/2017

Dr. Sanjay Yadav
(Dean Student's Welfare)

CC to:

The Director for his kind information

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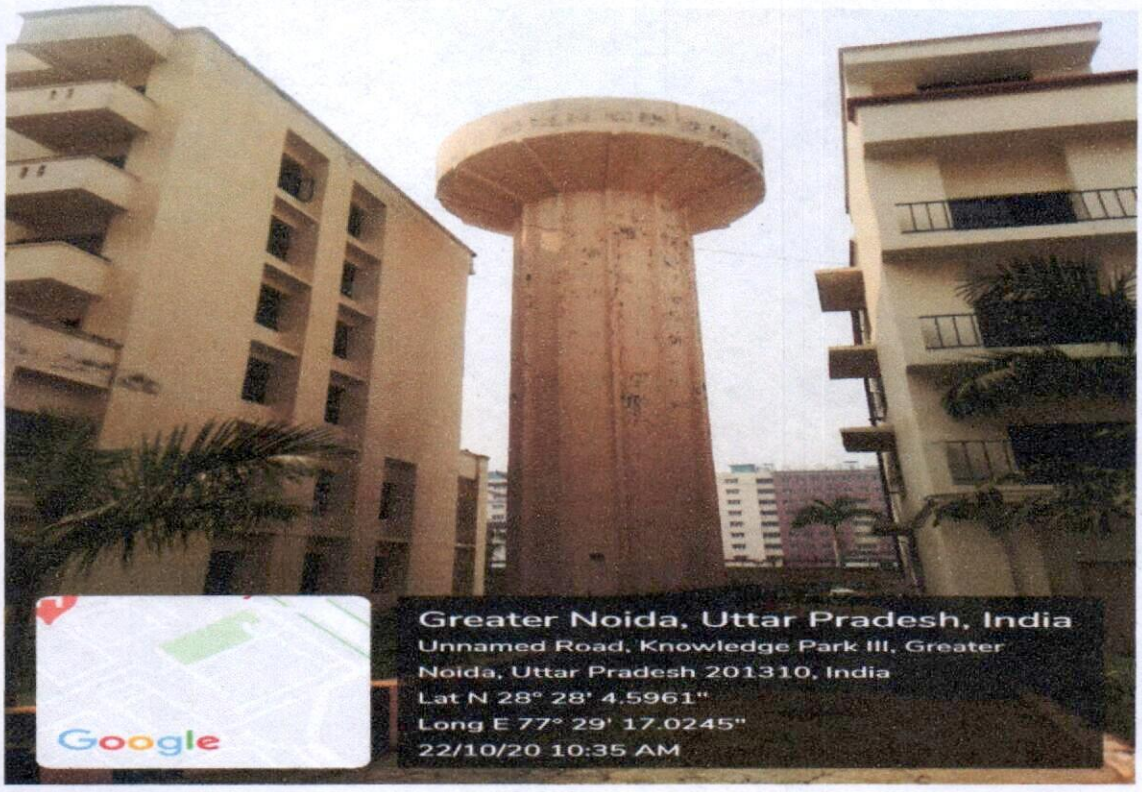
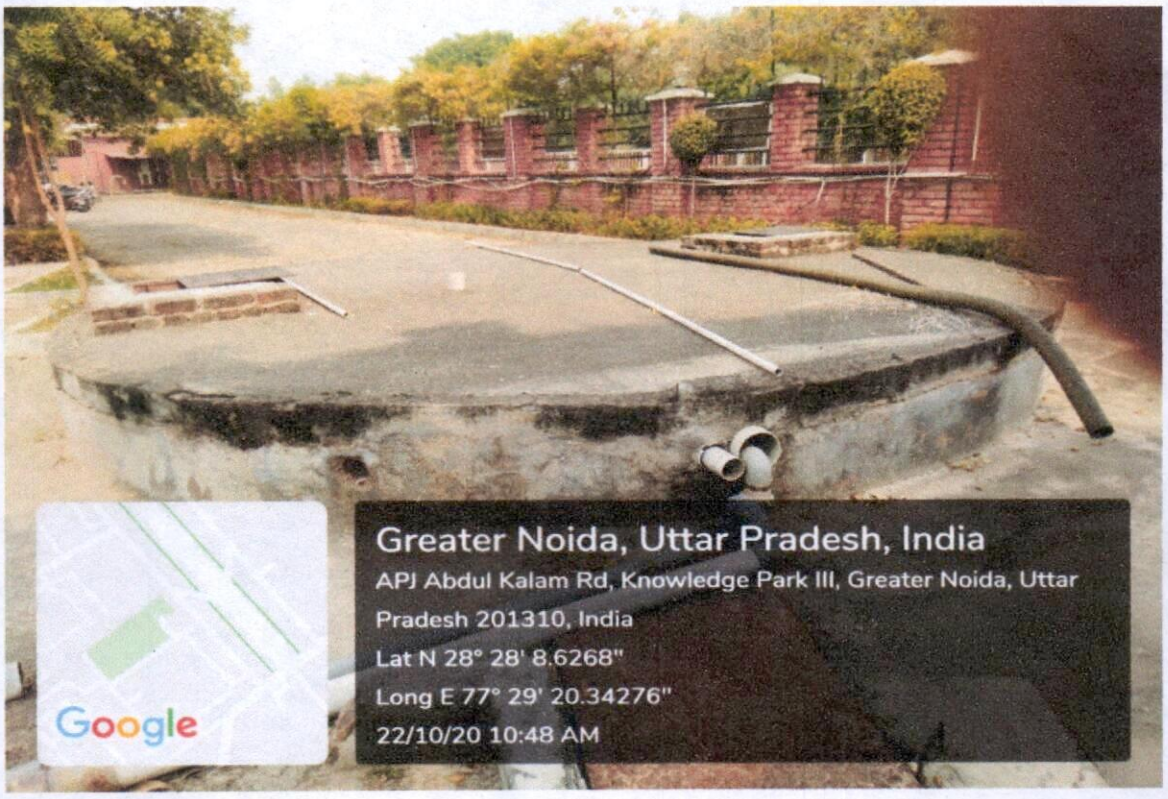
College Notice Board

Director
I.T.S. Engineering College
Greater Noida

Water Conservation through building rain water harvesting systems, bunds, ponds, and waste water recycling





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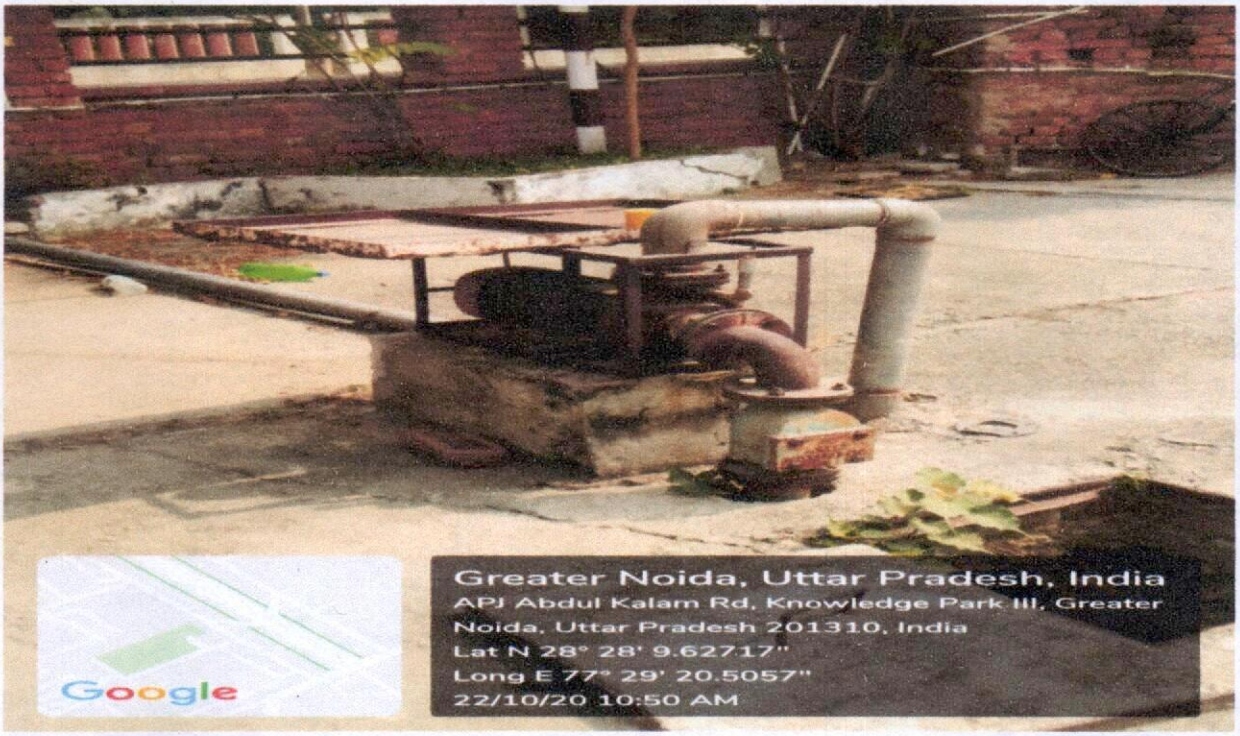
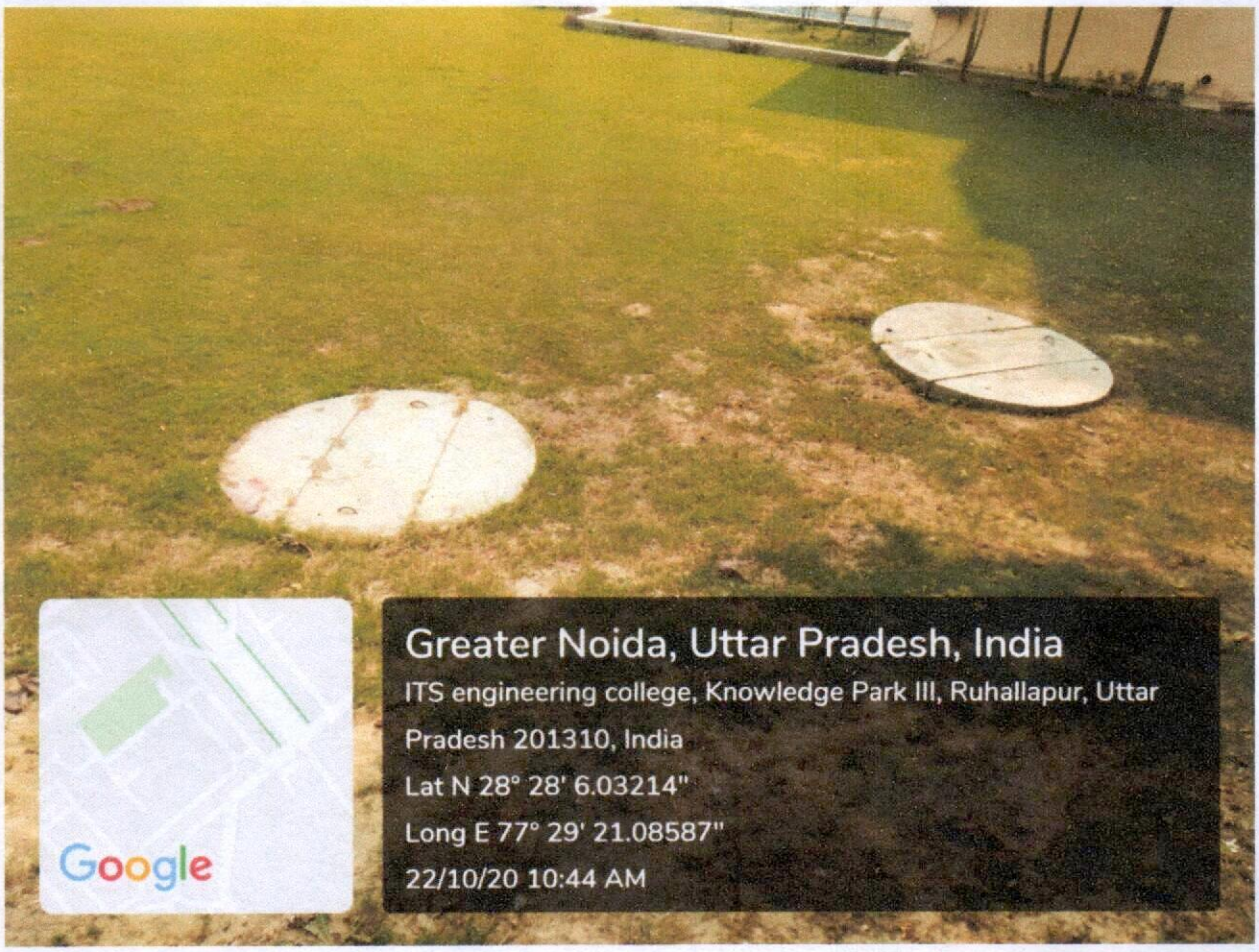
ITS Engineering College
Greater Noida





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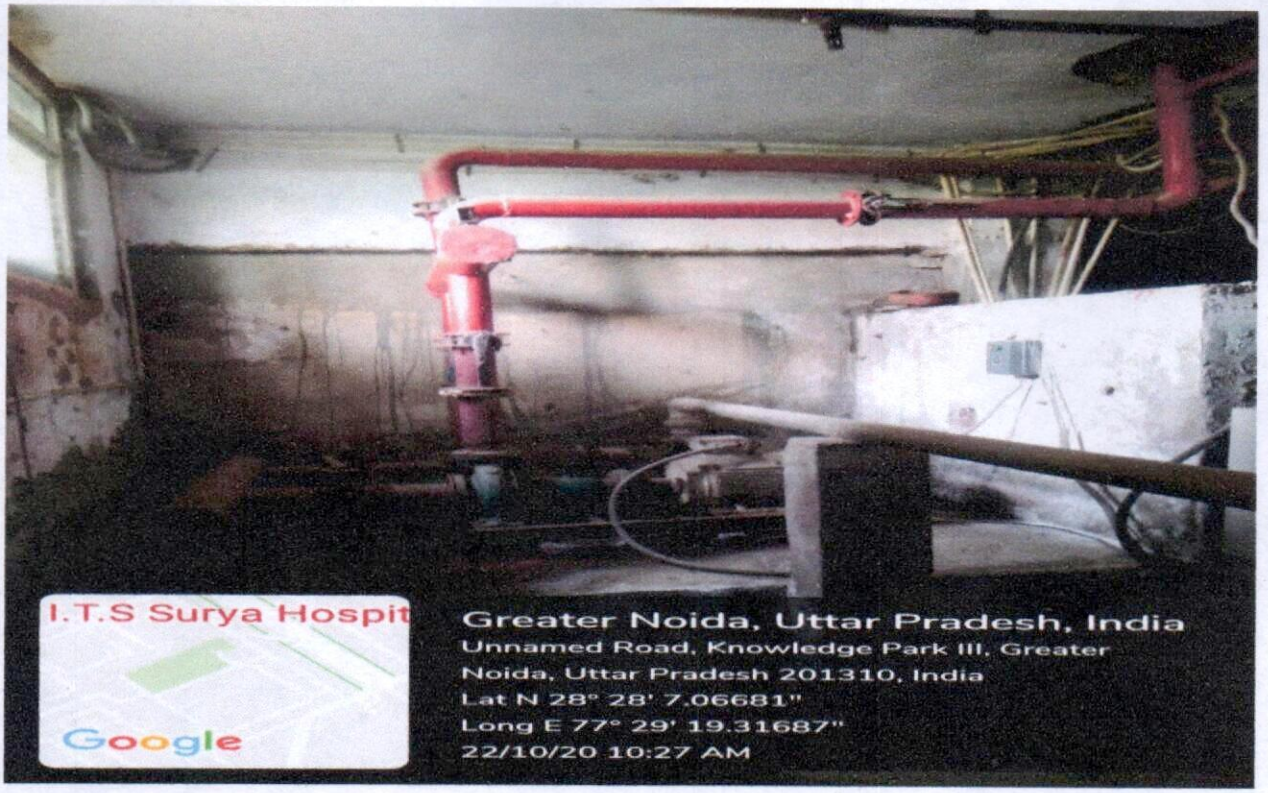

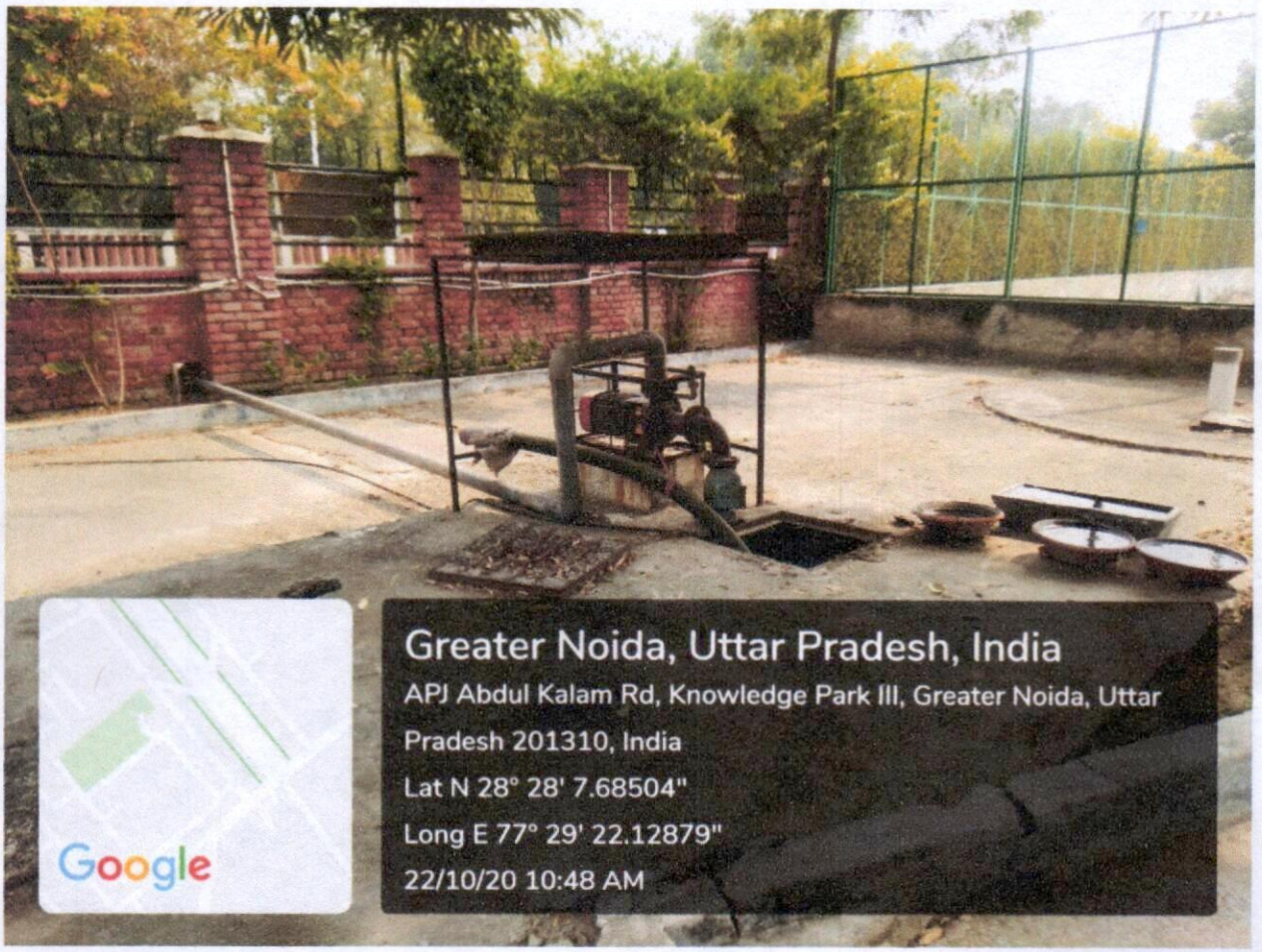

Director
ITS Engineering College
Greater Noida