

## PILLAI HOC COLLEGE OF ARCHITECTURE

Pillai HOCL Educational Campus, HOC Colony, Rasayani, Via Panvel, Dist- Raigad, Pin: 410207 Tel: 02192-669002

Web: www.phcoa.ac.in

mail: phcoaadmin@mes.ac.in

Approved by COA, Government of Maharashtra and Affiliated to University of Mumbai

Inst. Code- AR3427

# Criteria 7: Institutional Values and Best Practices

# 7.1 Institutional Values and Social Responsibilities

7.1.2

Geo Tagged Photos of Facility



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## **Criteria 7: Institutional Values and Best Practices**

## 7.1 Institutional Values and Social Responsibilities

# 7.1.2. Geotagged photos of the facilities

Sl. No.	Contents:
1	Alternate sources of energy and energy conservation measure
2	Management of Various Types of degradable and nondegradable Waste
3	Water Conservation
4	Green Campus Initiative
5	Divyangjan friendly initiatives







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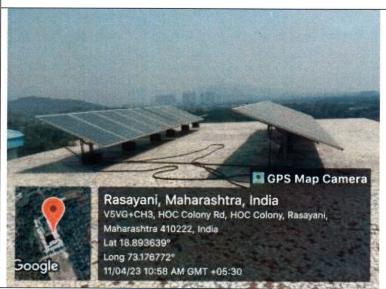
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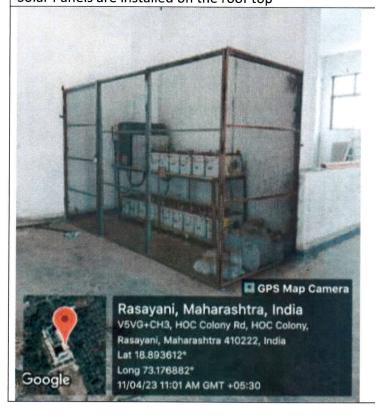
#### 7.1.2: The Institution has facilities and initiatives for

## 1. Alternate sources of energy and energy conservation measures

#### a) Solar energy resource



Solar Panels are installed on the roof top







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Solar power Battery and Inverter

Annual power requirement met by the renewable energy sources (in KWH)

Response: 11037.6

Total annual power requirement (in KWH)

Response: 645580.6

Percentage of annual lighting power requirements met through LED bulbs

Response: 28.48%

Annual lighting power requirement met through LED bulbs (in KWH)

Response: 25494

#### b) Energy conservation:

- Many major initiatives have been taken by the college to make the campus environment friendly.
- Eco-friendly KOEL Green Generators are used for power backup.
- All CRT monitors in the campus have been replaced with LCD monitors and use of slim tube lights;
- CFL bulbs, etc. are practiced.
- Electrical appliances with higher power savings are only purchased.
- Classrooms are made with sufficient cross ventilation and light so that the use of electricity can be minimized.
- Energy saving is additionally ensured by students and staff by switching off the lights and fans when not in use. Energy conservation messages are displayed in various parts of the campus.



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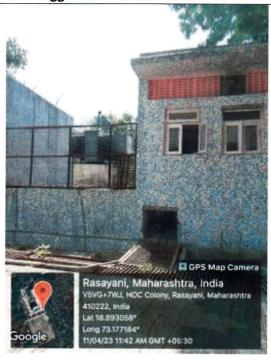
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#### **Geo-tagged Photos of Facilities**





Wheeling to the grid

**Fuel efficient Generators** 







o Use of LED monitors in Computer Lab





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Signages at Studio



Signages at in Staffroom

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2. Management of the various types of degradable and non-degradable waste

Waste Management measures include:

- a) Solid waste management
- b) Liquid waste management
- c) E-waste management
- d) Plastic free campus
- a) Solid Waste Management: Pillai HOC is an integrated campus where the solid-waste generated constitutes, paper, plastics, glass, metals, foods, etc. The total solid waste generated in the campus is about 45 kg/day, of which the major solid waste is generated by the canteen (kitchen waste) which is a shared facility in the campus. The biodegradable waste collected is further processed for bioremediation. Dry composting techniques are carried out in the canteen premises. Designated pits and baskets are available. The whole process of composting is followed thoroughly to get a good amount of manure at the end of 3-4 months. The manure is used for gardening purposes on campus. At PHCOA, as such paper, plastic, and food waste are generated, out of which the recyclable waste is collectively dealt with by collaborating with old/scrap paper dealers.
- b) Liquid Waste Management: Liquid waste generated by PHCOA is mostly Sewage waste and cafeteria effluent waste. The liquid waste is collected in an underground sewer system and is connected to a septic tank on the campus. The outlet pipe of the septic tank is connected with the sub-main of Grampanchayat and then the wastewater is treated at the Sewage Treatment Plant, Rasayani.
- c) E-waste Management: PHCOA has a limited generation of E-waste as we have a fully equipped computer lab and the electronic devices are limited to computers and printers. However, the Pillai HOC campus has several laboratories where electronic items are used and hence generate e-waste. It is collected and stored in a separate E-waste Collection Cell (EWCC) separated and segregated as per the characteristic properties of the items. Useful components from Computers, etc., are reused.



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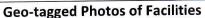
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Bins for Plastics only



Waste bins have been provided across the campus for the collection of the solid waste which segregated as recyclables and biodegradables



Bio compost pits and drums



Kitchen waste management – compost pit at Capteen





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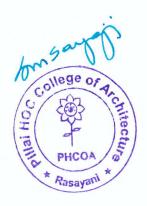
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Inauguration by Chairman Dr.K.M. Vasudevan Pillai





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#### 3. Water conservation

#### a) Rainwater Harvesting system

- Rasayani gets heavy rainfall, however, during summer the whole region faces curtailment of water supply due to heavy industrial and commercial demand. Hence, the conservation of water is a necessity. PHCOA campus has taken active measures to conserve water and maintain the resources to meet the water demand.
- Bore well and public supply line meet the general needs of the campus. And the water from monsoon rainfall is conserved using a rainwater harvesting system.
- This water-conserving system comprises a network of pipes that channelize the rainwater from the roof top and runoff into underground tanks and welldesigned recharge pits.
- The recharge pits are strategically placed in the vicinity to replenish
  groundwater which helps to maintain the groundwater level even during the
  summer. The water collected in large underground tanks is used for several
  purposes like gardening, maintenance of the playgrounds, lawns, and green
  cover.

#### b) Water conservation measures

- The campus has a drip and sprinkler system for gardening and watering of the lawns. The water is very consciously used for plantation and sanitation.
- The firefighting pipelines are well laid in and around the buildings and avoid any leakages.

The recharge of aquifers as done by using runoff water is promoted by the government of Maharashtra's scheme "paaniadwapaanijirwa" to make the state drought-free and for the enhancement of groundwater table for irrigation purposes.

Rainwater harvesting also reduces the water logging problem within the campus. This also improves the groundwater table within the area.



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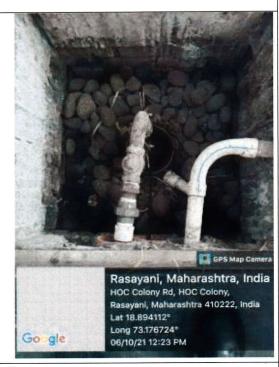
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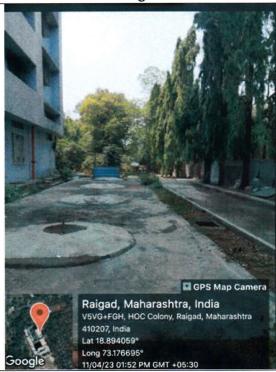
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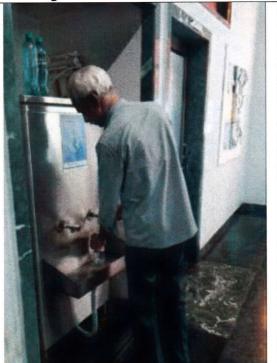


Rain Water Harvesting Unit



Storage tanks for harvested Rain water

Recharge Pit



Signages in Campus to Save Water





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Energy efficient Water pumping system





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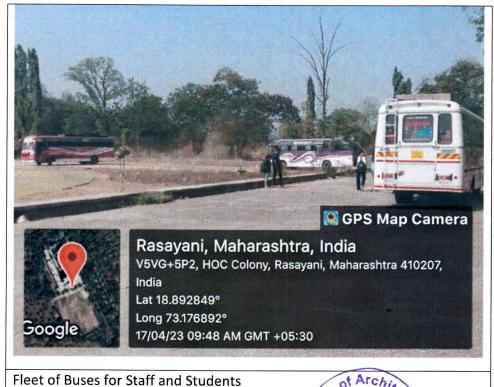
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## 4. Green campus initiatives

- a) Use of Public Transport by Staff and Students
- b) Restricted entry of vehicles
- c) Pedestrian-friendly pathway
- d) Maintained Green Landscape
- e) Plastic-free campus

#### a) Use of Public Transport by Staff and Students

- The college operates a fleet of buses to facilitate the students and staff. The
  institute encourages the staff and students to use the college transport instead
  of their own vehicles for safety, security, fuel conservation, and to reduce
  environmental pollution.
- The college buses are checked for pollution by the authorized agency.
- Parking on the campus is not permitted.
- Designated staff parking is provided in the rear periphery of the campus to make the campus more pedestrian friendly and maintain greener areas and keep the air clean



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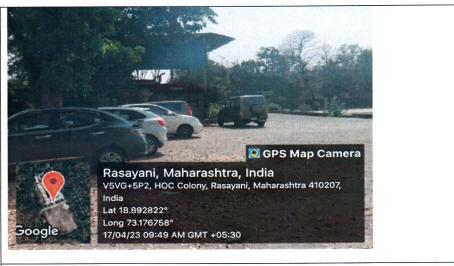
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Faculty parking at the rear periphery of the campus

## b) Restricted entry of vehicles





Designated staff parking is provided in the rear periphery of the campus to make the campus more pedestrian friendly and to maintain greener areas and keep the air clean.

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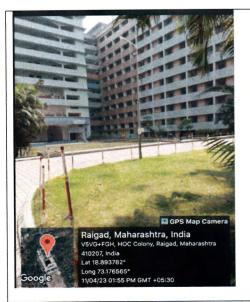
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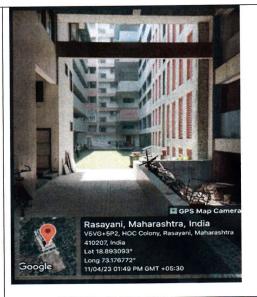
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#### c) Pedestrian friendly Pathways

As the campus is vehicle free with some exceptions, students and staff experience comfort walking through the pedestrian friendly pathways. The internal roads are lined with trees and solar lights and they are properly maintained by the campus maintenance committee.





Pathway lined by lawns

Passive cooled Internal Court





Gardening: cement Pipe planters

Permeable Pavers



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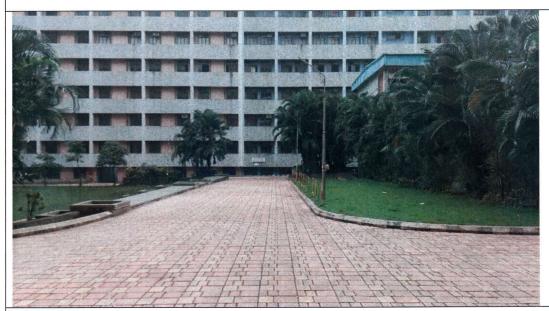
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## မ်) Maintained Green Landscape



## **Tree Lined paths**



Maintained green



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guideline and norms. Mandate accessibility standards are followed.

Facilities such as lifts, interconnection of buildings at every floor, ramps and rails, rest rooms, scribes for examinations, supporting the special needs of students who are unwell and injured, facility for left-handed writing during the examinations, etc. are provided. There are no compromises. As part of the curriculum, special electives subject on Barrier free design is also conducted.

Some of the facilities given are

- 1. Provision for lift
- 2. Ramp / Rails
- 3. Rest Rooms
- 4. Barrier free design: Special lectures and studios for students





Built environment with ramps

Lifts for easy access to classrooms.

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#### e) Plastic free Campus

- The students are encouraged to not use plastic and litter the same in then campus premises. Educating them about ill effects of plastic on lives and environment.
- Plastic Pet Bottle recycling machine are installed in the canteen premises.
- Dustbins are located in the campus where the waste is segregated into recyclables and biodegradable.

Thus, PHCOA is sensitizing the students about plastic waste.







Pet Bottle Reverse Vending Machine that can be used by students.

## 5) Divyangjan friendly initiatives

At PHCOA as an institution ensures that people with disabilities can access and navigate buildings, facilities and services on an equal basis with others. We ensure that there is equal participation in activities, such as education, events, workshops and social interactions. The aim is to prevent any kind of discrimination amongst the people and provide equal opportunities and offer equal treatment to the people with disabilities. Access to institutional facilities and services is recognised as fundamental human right.

In compliance with law and regulation the facilities here are designed per the guideline and norms. Mandate accessibility standards are followed.



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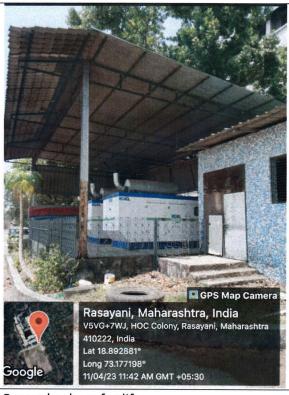
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Power back-up for lifts

Toilets for Specially-abled



Lecture and workshop on Barrier free design ( semester 4)

\* Alleon Sand