

Barkatullah University, Bhopal



Infrastructure Maintenance Policy Engineering Section (Works Department)

1. INTRODUCTION

The Barkatullah University (formerly known as Bhopal University) has an extensive infrastructure to deliver its teaching, learning and research programs. The Institute has an established system for maintenance and utilization of infrastructure in the campus.

The Works Department of the University is responsible for regular maintenance of all the infrastructural facilities, providing plans for campus development and other allied and incidental activities. It has civil and electrical wings and it operates under the supervision of Engineering section.

This document provides a framework and an outline on the allocation of responsibilities to ensure effective use and maintenance of existing infrastructure facilities.

COMPONENTS OF A MAINTENANCE SYSTEM

The Works Department maintenance system shall include the following components: -

- 1.1. Prioritization of work
- 1.2. Comprehensive work procedures
- 1.3. Performance standards and goals
- 1.4. Work order system
- 1.5. Long-range planning

By developing a maintenance policy that has these components in place, the department will have the tools it needs to control the performance of maintenance work at the University.

1.1. Prioritization of Work

The work priorities adopted by the Works Department exemplify its philosophy of delivering maintenance services. This priority system ensures that the most important maintenance work is done at a time it can be performed most cost-effectively. The maintenance priorities of the

University assets and buildings are as follows:

- i. Emergency repairs
- ii. Routine maintenance/services
- iii. Planned maintenance
- iv. Resident requests
- v. General cleaning
- vi. Inspection of work
- vii. Preventive maintenance
- viii. Miscellanea

This will ultimately decrease on-demand work and maintain the property in a manner that will keep students and staff satisfied.

1.2. Comprehensive Work Procedures

The Engineering section (construction and maintenance wing) will ensure that there are sufficient clear procedures in place to allow staff to implement the Maintenance Policy. All procedures will include the following:

- i. A statement of purpose.
- ii. The job title(s) of the staff member(s) for carrying out the activities in the procedure.
- iii. Forms needed to carry out the activities.
- iv. An annual review of the maintenance procedures.

1.3. Performance Standards and Goals

The Engineering section will establish measures that will allow the effectiveness of maintenance systems and activities to be evaluated. In establishing these standards, the University will take into consideration certain factors:

- i. State govt. works manual procedures
- ii. National Building Codes.
- iii. University Agreements.
- iv. Job descriptions of works to be undertaken.

Nothing in the documents listed above will prevent the Works Department from setting a standard that is higher than that contained in the documents. These standards and goals will be used to evaluate current operations and performance and to develop strategies to improve performance and meet the standards that have been set.

1.4. Work Order System

The Works Department shall have a comprehensive work order system that includes all work request information, viz. source of work, description of work, priority, cost and days to complete. This information is required for the University to plan for the delivery of maintenance services as well as evaluate performance. To obtain the greatest effectiveness from the work order system, all work requests and activities performed by maintenance staff must be recorded on work schedules which will include at the minimum, the following:

- i. Source of request (planned, inspection, resident, etc.).
- ii. Priority assigned.
- iii. Location of work.
- iv. Date and time received.
- v. Date and time assigned.
- vi. Work assigned.
- vii. Description of work performed.
- viii. Estimated and actual time to complete.
- ix. Materials used to complete work.

1.5. Long Range Planning

The Works Department will put in place and maintain a long-range maintenance planning capability in order to ensure the most cost-effective use of university resources and to maximize

the useful life of university properties. By developing a work plan, the University will be able to anticipate its staff, equipment and material needs. It will also be possible to determine need for contracting particular services.

2. MAINTENANCE OF PHYSICAL FACILITIES

The physical facilities in the university campus are maintained by the Works Department comprising of competent civil and electrical engineers. The services of plumbers, electricians, carpenters, etc. are available round the clock in the campus.

Electrical engineer is responsible for the uninterrupted power supply and maintenance of equipment like generator sets, general lighting, power distribution system, solar panels etc. Maintenance of water plumbing plants, sewage and drainage is undertaken by support staff.

In campus, the electrical and the civil complaints are handled by maintenance cell at campus which is also under the supervision of Engineering section.

The Engineering section with a team of members, monitors the maintenance and cleanliness of the buildings, classrooms, labs, furniture, campus ground, sports facilities, staff lounge, student's amenity areas, cafeteria and hostel buildings.

Horticulture work is also monitored by the Engineering section to ensure the environmental aspects and beautification of whole campus. The existing parks are also maintained by the section. Plantation drive is also carried out at several occasions, particularly in rainy season.

3. MAINTENANCE OF ACADEMIC BUILDINGS

Academic buildings (classrooms, labs, toilets etc.) are maintained by the Engineering section. The Heads of Departments report to the administration for all the maintenance works. Minor and major repairs related complaint/work are registered in the office and are attended on priority basis.

4. MAINTENANCE OF HOSTELS (BOYS AND GIRLS)

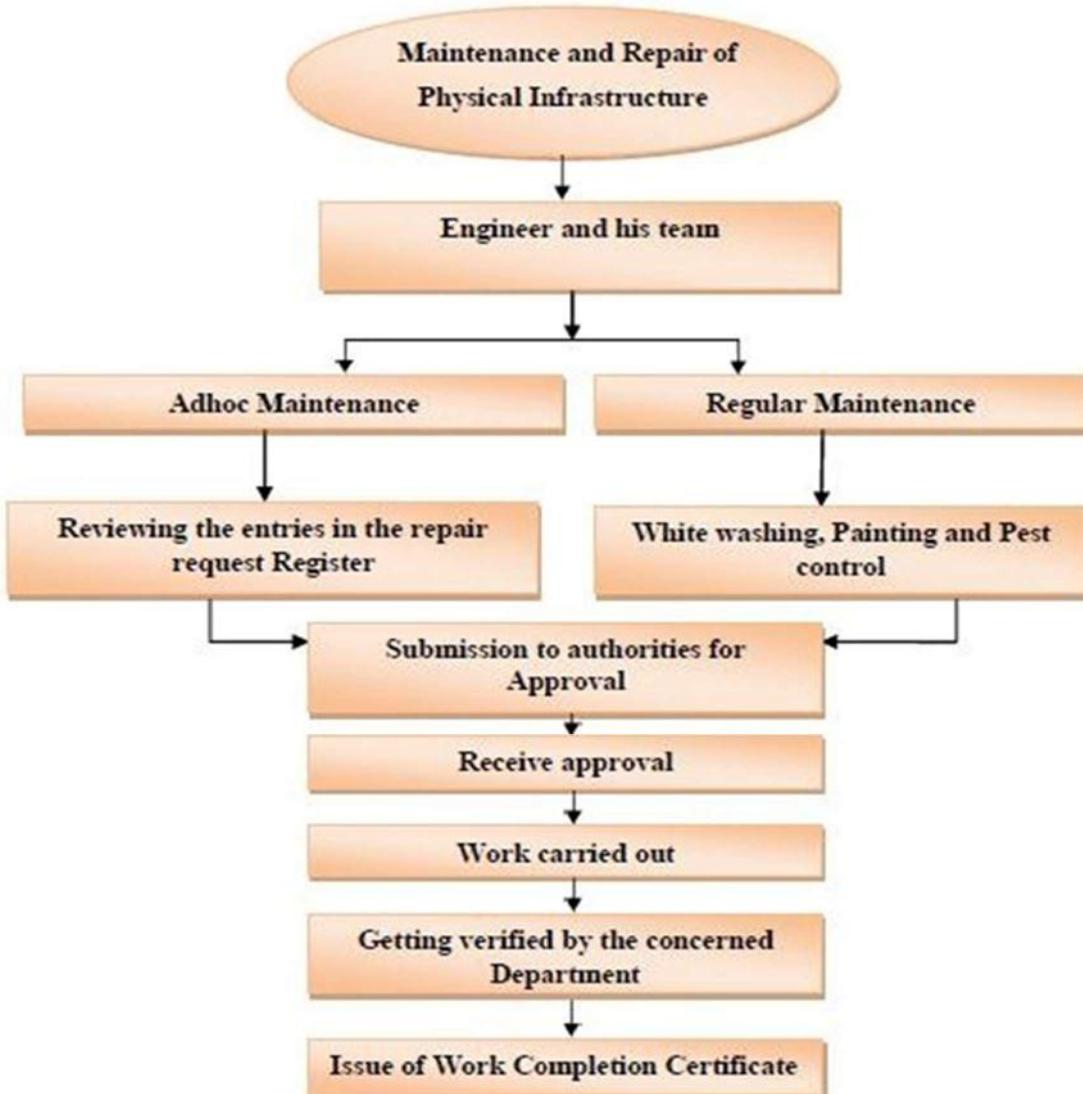
The maintenance of Boys and Girls hostel is carried out by Engineering section as per recommendations of hostel warden. The maintenance work includes the work of water supply, electricity, cleaning, emergency periodical and special repair work.

5. MAINTENANCE OF SEMINAR HALLS AND AUDITORIUM

Maintenance of Seminar halls and auditorium are under the purview of the Engineering section. Effective utilisation of seminar halls and auditorium for organising academic meetings, seminars, conferences and cultural events is made.

6. MAINTENANCE OF RESIDENTIAL BUILDINGS

The maintenance of Residential Buildings (Teachers, Officers and Employees qtr.) is carried out by Engineering section as per requisition of residents. The maintenance work includes the work of daily water supply, electricity, cleaning, emergency periodical and special repair work.



FLOW CHART OF PHYSICAL INFRASTRUCTURE MAINTENANCE

7. MAINTENANCE OF ROADS AND WATER SUPPLY SYSTEM

The campus roads (major and minor) and cross drainage is periodically maintained by Engineering section. The water supply system of campus, includes maintenance of sump well, open wells, borewells and a vast network of pipe lines and specials are under the purview of the Engineering section.

8. MAINTENANCE OF SPORTS FACILITIES

The Sports complex (Physical Education Building), under which different sports activities related facilities like play fields, tennis court, basketball court, cricket ground, gymnasium etc. are taking place, is also maintained by Engineering section.

9. MAINTENANCE OF ELECTRICITY NETWORK

The campus electricity network consists of HT and LT lines and Sub stations are maintained by Engineering section. The campus street light, high mast, household connection, Department building connections, hostels are also maintained. The standby power supply system (Generators and invertors) is also maintained. The campus is also facilitated by roof top on grid solar system to reduce the consumption of conventional power supply.

10. MAINTENANCE OF CAMPUS CLEANLINESS

Cleaning of the campus areas including the academic, administrative buildings and hostels is performed daily in the morning regularly, with the help of the outsourced housekeeping team. Toilets are cleaned twice every day. The whole campus area is maintained by the housekeeping agency under supervision of Engineering section.

11. CAMPUS DEVELOPMENT ACTIVITY

- i. To prepare proposals for infrastructural development in the campus as instructed by the Administration for University funded projects or for seeking funding from UGC/ RUSA, State Government and other Government projects through Registrar.
- ii. To coordinate with nominated government executing agencies for successful execution of such funded projects and submission of utilization certification.
- iii. To execute approved proposals for demolition of such dilapidated building structures which are deemed unusable for safety reasons through due process of auction on 'as is where is basis'.

12. ALLIED AND INCIDENTAL MAINTENANCE

- i. To prepare estimates of maintenance, repair, renovation or new projects as per approved schedule of rates prescribed by the Public Works Department, seek administrative approvals, carry out due process of inviting quotation, tenders, Expressions of Interest etc. as applicable as per prescribed respective limits for quotations, tenders etc., assign work to successful bidder.
- ii. To monitor approved works for timely completion and adherence of quality, verify and process bills for payment after due entry in measurement books, stock register etc.
- iii. To maintain records of all executed works and assist in provision of requisite information as needed to authorities, RTI and audit.
- iv. To ensure handing over the new added infrastructure facilities to the concerned In-charge of the office after verifying the lists of assets, fittings and fixtures etc.
- v. To ensure handing over the keys of the allotted residential quarters to the concerned teacher/employee as per the allotment by the Allotment Committee and also take the vacated quarter keys from outgoing occupant.
- vi. To issue No-Dues Certification to teachers/employees after ensuring all rental dues, electrical charges are paid and all fittings and fixtures are intact.
- vii. To assist in removal of condemned and discarded items of furniture, fixtures and furniture on the request of HOD or In-charge concerned to the scrap yard or store for disposal under the directions of Registrar.
- viii. In order to maintain the continuous water and electricity supply, incidental/emergency maintenance work is also to be carried-out at priority.

GLOSSARY:

- i. **Maintenance:** Work performed on a facility or the fixed systems and building service equipment therein, for the purpose of maintaining quality and function.
- ii. **Planned maintenance:** Upkeep of property, machinery, and facilities, including buildings, utility systems, roads, and grounds. It is often characterized by its routine or recurring nature.

- iii. **Preventive Maintenance:** Planned actions undertaken to retain an item at a specified level of performance by providing repetitive scheduled tasks that prolong system operation and useful life: inspection, cleaning, lubrication, and part replacement.
- iv. **Repairs:** The reconstruction or renewal of any part of an existing facility for the purpose of maintenance or restoration of its state.
- v. **Routine:** Essential services like water and electricity supply is maintained on regular basis to ensure uninterrupted supply.

Note 1:

All the procedures and protocols related with maintenance of infrastructure are subject to change in accordance with guidelines issued by M.P State Public Works Department / Guidelines issued by State Higher Education Department.