



UNIVERSITY  
OF  
JOHANNESBURG

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23

ANNUAL  
REPORT

**Our Future**  
Reimagined

# Facilities Management

The Facilities Management Division is a non-academic support division that offers services to faculties, academic support departments, students, staff, and other stakeholders. It is tasked with maintaining all academic and support facilities as functional, accessible, prepared, and safe. Activities include the development of new facilities, the maintenance and cleaning of buildings, infrastructure, installations, sports fields, gardens, and the extension and upgrading of infrastructure in accordance with clients' needs. The objective of support through Facilities Management is to enable improved teaching, learning, research, student life and the development of UJ according to its vision, through the fulfilment of the six strategic objectives of the University.

The Facilities Management Division is divided into the following support departments:

- Campus Facilities Management (CFM)
- Central Technical Services (CTS)
- Property Management
- Occupational Health and Safety (OHS)
- Logistics
- Sustainability, Environment and Utilities (SEU) (newly established)

The following report is structured in terms of portfolios: infrastructure; property management; student residences; sustainability, environment, and utilities; logistics support; and central technical services comprising portfolio management, maintenance management and space management.

## ***Occupational Health and Occupational Safety Portfolio***

A full report from this portfolio is to be found in Section Seven of this UJ Annual Report.

## **SIGNIFICANT RISKS AND RISK MITIGATION DURING 2023**

The Facilities Management Division actively monitored and updated the Operations Risk Register and Risk Management Plan on a regular basis to ensure that risks that may impact the institution are appropriately and actively ascertained, addressed, or managed.

- Electricity outages increased as caused by continued high stages of load shedding. On Soweto Campus, unrelenting cable theft led to protracted periods of electricity outages. This resulted in the development of a baseload supply of electricity via increased solar panels and a diesel generating unit. A similar approach will also see construction of a gas generating unit on DFC.
- Water supply cuts continued in 2023, necessitating the procurement of more water in 2023 than in previous years to mitigate the risk of discontinuing university operations on the worst affected campus,



APK. By the end of the year, procurement had started using two in-house trucks to reduce buying externally at excessive cost. Further mitigation will come in the form of a grey water recycling pilot project at Ndlovukazi residence on APB, as well as a 48-hour water reservoir on APK. These high-priority projects, as well as other water initiatives, will be implemented in 2024.

- The priority Student Residences Backlog Maintenance Project started in December 2023, when the targeted residences were empty. Most of the planned renovations were completed before the start of the 2024 academic year.
- Renewal of maintenance contracts for 2023 – Owing to risks identified in previous years resulting from expiring contracts, the issue has been actively managed to ensure that procurement of maintenance contracts took place in advance of contracts expiring. Delays due to procurement challenges, however, meant that some contracts had to be extended on a temporary basis while awaiting finalisation of procurement processes.
- The risk of vacant positions was addressed to an extent during 2023, with new vacancies filled during 2023.

## **STRATEGIC FOCUS AND TARGETS ACHIEVED IN 2023**

Focus on energy and water security intensified in 2023. The largely successful but costly mitigation processes provided water and decentralised power backup for all critical operations of the University. However, going forward in an environment unlikely to provide the necessary resources, the University will need to develop historically unconventional solutions, which are termed Strategic Utility Projects. This means scaling up water recycling efforts, increasing PV solar energy solutions, and developing baseload (diesel and gas) power generating plants. For the first time, the University will be an independent power producer (IPP). All new initiatives were at completed development stage or had been advanced to Supply Chain Management (SCM) to appoint contractors.

### ***Infrastructure Portfolio***

In response to University growth and the need for additional academic spaces on campuses, as well as space constraints, especially on APK, the University prioritised learning and teaching and research programmes on campuses and sourced additional space for support staff off-campus. The recently acquired JBS Park building was successfully occupied by the Johannesburg Business School and the Graduate School of Architecture together with several SARChI Chairs. During 2023, the University acquired the Atrium Building on Stanley Avenue, for occupation by HCM, ICS and Finance divisions as anchor tenants. The property was transferred to the University in December 2023. Modifications to the building started immediately. The repurposing of on-campus spaces left by these divisions will start in 2024.

### ***Property Management Portfolio***

The Property Management Department manages, controls, and conserves all properties owned, leased, and disposed of by UJ; it also investigates development possibilities in accordance with the approved UJ Master Development Plan. The Department collected rentals according to the lease agreements in 2023, with the addition of new tenants on APK and APB. Backup power has also been provided for all four student centres (APK, APB, DFC and SWC), as well as Mayine, based on APB, which accommodates the majority of PDRFs.

A maintenance strategy is currently implemented on all properties outside UJ as these are not in good state. The properties experience roof leaks and as a result damage to structure and equipment.

The following town planning and land-use rights applications have been submitted to the City of Johannesburg (CoJ) for consideration and approval:

- Rezoning and consolidation of APB Campus – registration is being finalised.
- Orlando eKhaya Project in combination with a City of Johannesburg land exchange proposal – land was subdivided, consolidated and included in an application for the establishment of a township as per the land exchange agreement between UJ and the Johannesburg Property Company. Alternative proposals were submitted by the CoJ regarding the management of the SWC Wetland.
- Erf 1/809 Auckland Park: UJ has won the legal action case against the Apostolic Faith Mission Church AFM, which had resulted in an appeal lodged by the AFM in June 2018. The property has been registered under UJ.



- The lease agreement between YMCA and SWC had expired in 2019; the lease has not been renewed as new residences have been built on the campus.
- Title deed register – completed and ongoing. The Atrium Building is the latest addition.
- The Property Database is updated annually.
- Student centres: Most of the leases across all student centres were concluded in 2023 and will now expire in 2026. Lease negotiations with the banks were ongoing, with conclusion targeted for early 2024.

### **Student Residences Portfolio**

Facilities Management, in support of Student Affairs, commenced the multi-year project of student residence refurbishments that had been approved by UJ Council for implementation during 2023/2024. The objective is to address backlog maintenance and ensure compliance with DHET minimum norms and standards. Nine residences were prioritised, and work commenced in December 2023.

### **Sustainability, Environment and Utilities (SEU) Portfolio**

In 2023, the SEU was established to initiate, support and drive sustainability environmental initiatives and utility management across all campuses; a director was appointed in September 2023.

The successful implementation of two electric vehicle (EV) buses on the intercampus bus routes led to a plan for a phased rollout intended to upgrade the full fleet of 15 EV buses over the next five years; approval for this plan is being sought. Lower operating costs, reduction in UJ's reliance on fossil fuels, the elimination of CO<sub>2</sub> from UJ transport operations as well as the benefits accruing in terms of environmental reporting are key motivations for this plan.

Solar PV initiatives have been planned for JBS Park, UJ on Empire as well as APK. Commissioning is planned for 2024, including for the new baseload generating units on APB and SWC. Similar initiatives for DFC and APK will follow the proof of concept on SWC and APB.

Towards the end of the year, procurement started for a grey water harvesting pilot project at the 250bed Ndlovukazi women's residence on the APB Campus. The 48-hour reservoir project, currently in procurement stage, will be implemented in 2024.

### **Logistics Support Portfolio**

The Department strives to render effective, efficient, and reliable logistical support to the University, including the following:

#### **Logistical services**

- Intercampus bus shuttle service.
- Intercampus logistical service.
- Ad hoc bus bookings – (external rental through the appointed service provider).
- Ad hoc vehicle bookings – (external rental).

#### **Central transportation services**

- Client bookings for minibuses and midi buses (UJ fleet).
- Client bookings from PsyCaD (special wheelchair access vehicles for People with Disabilities ? PWD) and from any other university groupings requiring official transportation, including research trips, team building trips, sport events, field trips, airport transport, conferences, and seminars.

### **Central Technical Services Portfolio**

The CTS provides strategic planning and implementation of capital projects and maintenance of UJ's physical infrastructure within the framework of the University's Infrastructure Master Plan and other key initiatives.

The CTS consists of the following sections:

- Portfolio Management Office (delivery of capital, infrastructure maintenance projects).
- Maintenance Management (centralised maintenance function for the University).
- Space and architecture.



A portfolio methodology was used in 2023, with a differentiation between major capital, priority, and normal project types. The Project Portfolio Office (PPO) project management software system continued to form the backbone of project monitoring, management and reporting in 2023.

### **Portfolio Management Office**

The Portfolio Management Office managed various projects through the course of 2023 and completed 27 projects within 2023 compared to the 52 completed in 2022, and the 44 completed in 2021.

#### **2023 completed projects**

The following major capital project was completed in 2023:

- DFC Rescue Simulation Centre – Achieved practical completion November 2023. Additional post Phase I and Phase II project items will be attended to in 2024.

The following 11 priority projects were completed in 2023:

- Developed the 150-seater Chemical Sciences Laboratory on the Doornfontein Campus.
- Established future-fit lecture venues (total of 12 on all four campuses).
- Completed John Orr chemical storage cabinets.
- Upgraded DFC Campus Joe Slovo and Sherwell Street gate.
- Replaced Magnolia and Moshate Heights lifts.
- Completed alterations and additions to lecture venues to accommodate audiovisual requirements.
- Completed DFC Civil Engineering lab upgrades ? Phase 3.
- Completed SWC storm water drainage.
- Completed JBS Park building fit outs – Auckland Park.
- Completed SWC Adelaide Tambo rapid incubator alterations.
- Completed DFC John Orr Laser Research Centre 2116, 2304T and 2304U alterations.

The following 15 normal projects were completed in 2023:

- APK C Ring walkway structural repairs.
- DFC-PEETS building waterproofing repairs.
- APB Biokinetics stainless steel pool rails.
- DFC assessment of as-built services and utilities reticulation.
- DFC renovation of a clinical pathology laboratory.
- DFC Laser Research Centre Lab 2311 refurbishments.
- APK ICS Offices ? A Ring 3 HVAC and ceiling replacement project.
- Office alterations for Audiovisual Department on DFC Campus.
- DFC lecture venue upgrade at Lwazi 105A.
- DFC quality and operations ? 2022 Projects Offices.
- Supply and installation of a 350KVA and 600KVA diesel standby generators for APB and DFC Data Centre.
- DFC QK Building 2nd Floor 75-seater lecture venue.
- DFC John Orr 1110 alterations and renovations Phase 2.
- APK B Ring 04 Micro Lessons room alteration.
- Replacement of DFC 11kV HT main substation old oil circuit breaker switches with circuit breakers.

The following land use compliance projects continued in 2023:

- DFC New Science and Engineering Building Site Development Plan was approved and received from CoJ.
- Original title deeds for various properties were replaced.
- The Atrium Building ownership was transferred to UJ in December 2023.

### **Maintenance Management**

#### **Reactive on-demand maintenance**

The CTS Maintenance Service Desk uses the ArchiBus system to manage reactive (unplanned) on-demand maintenance and scheduled preventative maintenance. In total, 36 304 requests for on-demand maintenance were logged in 2023. CTS monitors the response times by the Campus maintenance teams through the service-level performance score (SLPS), which is a composite score that measures maintenance



service response against multiple priority levels. The score also incorporates a performance satisfaction rating by the client. Statistics of requests logged, processed, and closed were used to calculate the (SLPS) figures with the aim of achieving a target of 3.5 (3 for acceptable and 5 for excellent). Monthly scores ranged between 2.86 and 3.55.

### **Preventative maintenance (PM)**

Scheduled maintenance is identified as planned or preventative maintenance. PM compliance refers to the percentage of issued vs completed preventative maintenance work orders for each month.

During 2023, preventative maintenance compliance for all campuses averaged 92,84%. This is a considerable improvement against 2022, where preventative maintenance for all campuses averaged a compliance level of 75,73%.

### **Lift maintenance**

The number of lift stops increased from 484 for 2022 to 594 for 2023. The cause of this is the increased load shedding, which has an impact on lifts and can cause stoppages – which must then be cleared. Remedial action will be taken for the lifts with high stoppages caused by the 12v circuit fault, backup generator issues, backup battery failure, etc.

### **New lifts**

No new lifts were installed during 2023. The warranty of the lifts installed in 2022 ended and maintenance oversight was transferred to the UJ SLA suppliers.

### **Future lift upgrades**

- Major modifications are planned for the SWC Campus Library lift and for the SWC Campus Sports Complex lift.
- Robin Crest lift upgrade – Procurement started in 2022, for implementation in 2023. This project encountered legal issues and is planned to be re-tendered in 2024.

### **Space management**

The Building Space Management Policy has been in place in draft format for many years; it was approved in principle by MEC during 2016. The Policy has continued to be used as a general guideline for the management of building space. The DHET guidelines in terms of space use were also referred to regarding space allocations during 2023.

### **Space data overview**

UJ had a gross built area of 799 833 m<sup>2</sup> at the end of 2023. The following new or refurbished buildings were in the process of being updated into the space database as applicable:

- Off-campus – JBS Park
- DFC – New Science and Engineering Building
- UJ residences (various)
- DFC – John Orr updates
- DFC – Qoboza Klaaste Building updates
- The Atrium Building

Space data audits and other major initiatives

- HEMIS data regarding teaching and learning venues were updated to align with ITS data for timetabling activities as an ongoing effort.
- Archibus and ITS started collaborating on an integration project to ensure that certain HEMIS space data attributes are pushed to the ITS system to help ensure data accuracy and alignment.
- Several outstanding AutoCad plans were received from professional contractors, and several buildings were measured and drawn up by temporary interns for processing and capturing in 2023/2024.
- Space planning was in progress with assistance from the COO Project Office.

### **HEMIS reporting**

- The HEMIS (Higher Education Management Information Systems) annual submission of space data for 2022 was submitted to DHET on time at the end of May 2023.



### ***DHET reporting***

DHET reporting proceeded in good order during 2023. However, DHET has dropped the online portal format and again introduced individual manual reporting. Additionally, DHET also requested a monthly report back over and above the quarterly reports. DHET also confirmed that there would be only limited funding available for the envisaged 2022-2024 macro-infrastructure funding cycle. Engagement with DHET on the matter was ongoing during 2023.

- DHET Annual Narrative Report on Infrastructure and Efficiency Grant Funding (IEG) was compiled and submitted to DHET on time at the end of February 2023. The DHET reporting cycle has changed to align with the calendar year – thus going forward the report will now be submitted earlier.
- DHET reporting for monthly, quarterly, and annual reporting was in accordance with the requirements stipulated under the DHET macro infrastructure framework guidelines and principles.
- A Treasury Projects Reporting Portal was also established, and FHET/UJ-funded projects and progress information are now also reported on the Treasury IRM.

### ***Universal access and PWD projects***

- The Space and Architecture section continued to assist UJ PsyCaD with planning and project implementation regarding universal access and people with disabilities (PWD). A highlight was the completion of internal and external ramps at the APK Auditorium to allow PWD to join their student colleagues accessing the stage during the graduation ceremonies.
- Completion of a pedestrian walkway on Soweto Campus.
- Consultants were appointed for the design of a pedestrian walkway for UJ APK.
- Planning is in progress for the upgrading of certain residences to accommodate additional space to meet universal access requirements.

## **STAKEHOLDER ENGAGEMENT**

Facilities Management had the following engagements with external stakeholders during 2023:

- With the City of Johannesburg and its utilities entities, such as City Power and Johannesburg Water, in an effort to resolve billing discrepancies and to ensure compliance during construction projects. Following up on power and water disruptions and anticipated restoration times were also considered.
- Intensified engagements with City Power, given the development of power generating units in the University.
- With the CoJ Building Control Office, to resolve difficulties in respect of occupational certificates, plan submissions and site development plans.
- Continuous consultation with the Johannesburg Roads Agency (JRA), Johannesburg Development Agency (JDA) and Johannesburg Property Company (JPC), about current and future development projects by both the CoJ and UJ.
- Continuous liaison with ward councillors regarding the following: community and city council projects, UJ projects and their impact on community and surrounding environment, facilitation of collective projects and forums, e.g. improvement task teams, rejuvenation and refurbishment of wards, servitudes, street children, traffic intersections, DFC/APB surrounding projects, Egoli Gas development and corridors of freedom projects.
- Remote/virtual meetings with DHET addressing DHET and Treasury announcements; performance of the Infrastructure Efficiency Grant (IEG) funded projects was managed via quarterly and annual reporting as well as oversight visits.

## **MOVING FORWARD, THE STRATEGIC FOCUS AREAS IN FACILITIES MANAGEMENT IN 2024**

Raising the global stature of the University with provision of world-class facilities while mitigating the water and electricity (energy) challenges. Striving for zero disruption of critical operations initially and then of all operations of the University in an increasingly incapable utility supply environment. This will also include mitigating general infrastructure failure affecting the University, e.g. sewer and storm water infrastructure, and traffic lights.



- Sustainability projects aimed at managing waste better while reducing, monitoring, and controlling utility consumption, including pursuit of the reduction of the University's carbon footprint, which includes the green star rating of University buildings.
- Maintenance management strategy and maintenance maturity, reducing reactive maintenance for more planned and proactive engineered asset management.
- Scaling up progress towards being a smart university.



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