

CONSTRUCTIVE CHANGE

Physical Planning
University of the Free State

2011



Laying the foundations for a transformed future

Buildings are not merely buildings; they signal change and renewal. They convey a sense of new departures and new destinies. They connect the traditions of the past to the ambitions for the future. Buildings are certainly not neutral; they send powerful messages about who we are, and who we would like to be.

The architecture of the University of the Free State portrays a rich history of more than 100 years, connected through its roots to Grey College, the famous boys' school next door, and to the designs of the judicial capital of South Africa, Bloemfontein. That sense of tradition is not only reflected in our buildings, but also in our policies as

a university. We do not wish to bury our past, but to retain and celebrate the best from that past with its trauma and its triumphs.

At the same time our buildings must reflect our new country and the ideals of constructing a non-racial community where inclusion and embracing envelop everything we do inside those new structures – teaching, learning, research and the building of common purpose inside the Kopsie community. In other words, a building not only signals value to the outside; it also builds value on the inside. That is why it is important to enter the impressive array of buildings presented in this book to see how space has been organised and allocated to enhance the building of a community and to give academics, students and communities a sense of belonging to the university.

To our contractors and especially our main force behind matters of building and architecture, Mr Nico Janse van Rensburg and the Vice-Rector Operations, thank you for your investment of time and energy in imagining and constructing a democratic future for the University of the Free State.

Prof. Jonathan Jansen
VICE-CHANCELLOR AND RECTOR



Infrastructure development at the University of the Free State

The University of the Free State adopted a Campus Structure Plan in 1999. Since then, numerous development projects have been undertaken.

As guiding principles, it was decided to densify the Bloemfontein Campus where feasible, and to enhance the campus environment to create attractive spaces for students in which to learn and socialise. These same principles are applied in the development of the university's Qwaqwa Campus. This includes the creation of dedicated pedestrian routes that offer safe and easy movement for students between destinations as well as areas to pause and socialise.

The decision to locate the new library on the west portion of the Bloemfontein Campus in the late 1970s envisaged that future development would take place in this direction, but this did not happen for many years. The construction of a new student centre, the Thakaneng Bridge, situated across DF Malherbe Avenue, was the first step in physically uniting the two sections of the campus. Since its completion in 2004, other developments have followed.

The library and student centre form the core of the Bloemfontein Campus, surrounded by academic and residential neighbourhoods and precincts. The siting of new developments is based on the principles and guidelines outlined in the Campus Structure Plan. The evolution of the plan is regularly reviewed by a committee specifically convened for this purpose.

Apart from new academic and residential developments, a number of buildings have been refurbished during the past 10 years. This includes the rendering of buildings accessible to people with disabilities.

Together with a mature and well-maintained landscape, the respective environments of the University of the Free State's campuses already proudly compare with what the best campuses in the world have to offer today.

The university recognises that a well-planned and attractive campus environment forms an integral part of the learning experience of students and their transformation into the future leaders of our society. The Campus Structure Plan is taking shape and ultimately our campuses will reflect contemporary thinking on campus planning and layout.

Anton Roodt
PROFESSIONAL CONSULTANT ON CAMPUS PLANNING

Growth and progress. This is what visitors experience when coming to the University of the Free State.

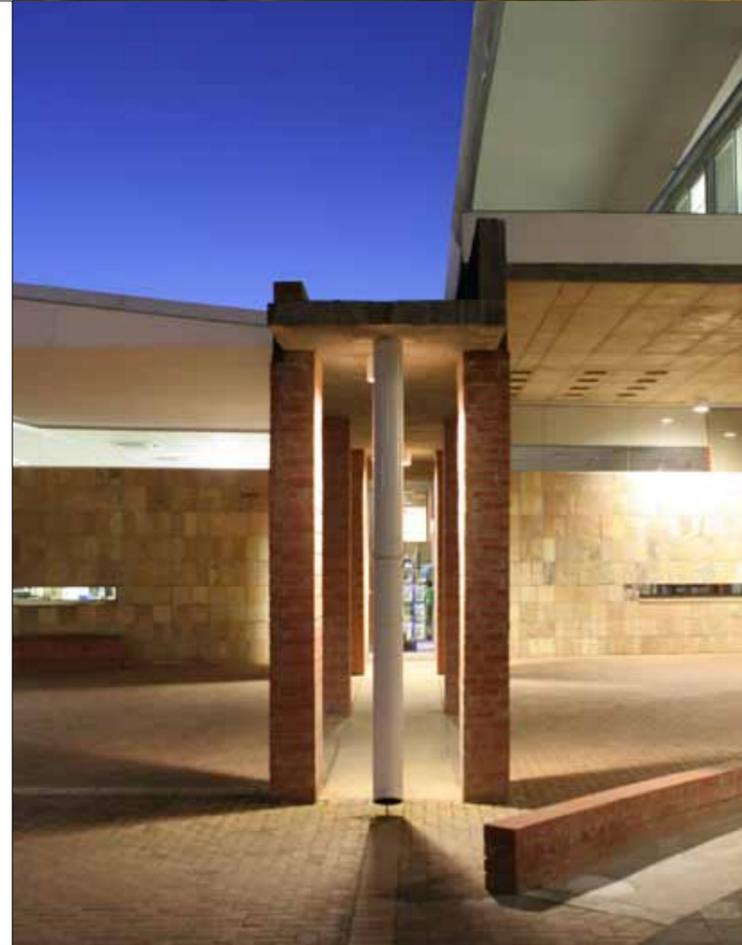
On the Bloemfontein and Qwaqwa Campuses new spaces have been created where staff and students can learn, work and live. Infrastructure development on our campuses will continue.

Our green building strategy involves using material that is environmentally friendly and resource-efficient. It expands and complements the classical building design, while addressing concerns of economy, utility, durability and comfort, thus

ensuring sustainable buildings.

I want to express my appreciation to everyone at the UFS for their commitment and for thinking far beyond the boundaries of conventional design.

Prof. Nicky Morgan
VICE-RECTOR OPERATIONS



Thakaneng Bridge

The Thakaneng Bridge forms the heart of student life on the Bloemfontein Campus of the University of the Free State.

Thakaneng is the Sotho name for a "place where young people meet to socialise and study".

The construction of the Thakaneng Bridge was the first step in uniting the east and west sections of the campus. Since its completion in 2004, other developments have followed.

ARCHITECTS | The Roodt Partnership



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The University of the Free State received a generous grant from the National Lottery Distribution Trust Fund (NLDTF) to develop and implement the Lotto Sculpture-on-Campus Project. The project has allowed the university to commission artists to create a unique and permanent public sculpture collection on the Bloemfontein Campus. Its key focus is to set up diverse and site-specific sculptures that promote a greater understanding, respect and appreciation of cultural differences and installs a sense of belonging for all.

The project has had the privilege of acquiring and commissioning several artworks – most by leading South African sculptors – that have been positioned at different locations on campus.

ARTIST | Noriah Mabasa
Unity is power: Let us be united (situated at the Computer Laboratory at Thakaneng Bridge)

BLOEMFONTEIN CAMPUS |
NEW BUILDINGS



Health Sciences Building

The new Health Sciences Building arose from the need to accommodate a greater annual intake of students in the Health Sciences.

Balancing the list of needs against the available budget resulted in a design solution that addresses two major functional needs in two separate building blocks. The first block houses student-centred lecture spaces, and the second under- and postgraduate student administration, the Department of Dermatology and the Department of Sports and Exercise Sciences. Brightly coloured structural elements and the use of landscaping create a visual link between the two blocks.

The student-centred block makes maximum use of an internal/external arrival space with a bright, glass-enclosed foyer, from

where students progress to the multi-functional teaching spaces. Multi-functionality demanded level-floor teaching spaces, the largest of which accommodates 200 students, all including interpreting facilities.

The staff block incorporates shared meeting spaces and hot-desk workstations in the interest of economic space utilisation. The patio can be used for meetings and informal gatherings, weather permitting.

ARCHITECTS | Goldblatt Yuill Architects





Clinical Skills Centre for Allied Health Professionals

Allied health professionals, for example, occupational therapists and physiotherapists, are members of a profession that reaches out to the communities it serves, stimulates physical and psychosocial well-being and adapts to existing restraints. The new Clinical Skills Centre for allied health professionals captures these qualities and communicates them to the public.

The building communicates through an interactive wall on the southern façade. Elements on the northern façade lead the students into the building, creating an intermediate space. The same concept is repeated on the southern façade, with a ramp that lifts and guides the public to the entrance. The splits in the southern façade allow the public to participate visually in

the activities on the inside, giving them insight into the allied health professions. The courtyard is an extension of the skills laboratories, allowing the students to do practical sessions inside or, weather permitting, outside, again visible to passersby.

ARCHITECTS | Cube





Economic Management Sciences and Lecture Hall Building

The new Economic Management Sciences and Lecture Hall Building will address the long-awaited need for lecture hall facilities on the Bloemfontein Campus of the University of the Free State to cater for the growing student numbers and create a new image for the Faculty of Economic and Management Sciences.



The new building is located on the northern side of the campus, adjacent to the Wynand Mouton Theatre. Upon completion, it will form a bridge between the central campus area, the taxi terminus, the northern parking areas and the Thakaneng Bridge on the western edge of campus.

The construction includes two separate buildings; the first being a building with lecture halls, including an auditorium for 800 students, as well as six 64-seater and two 25-seater lecture halls. The second building will house lecture halls, offices and public areas.

The conceptual idea was to create a fragment of an urban environment, with intertwining and overlapping functions. On campus, as in all city environments, the varying public realms of pedestrian and vehicle flow, as well as public areas are intricately linked together. By extruding the two buildings over the site, open public spaces and a backdrop for students to congregate are created. The building overlaps with the existing streets on the east and west, promoting student flow through the site and buildings. This enables spontaneous human interaction and flow in a flexible way, which was one of the key elements of the design.



Pedestrian, student-flow and public spaces were designed to become part of the building visually and physically. Transparency is created with the use of lightweight structures and glass in the public areas. Whilst the main activities (lecture halls, auditoriums, etc.) and the public areas and cafeterias are at the ground and lower levels, the lecturers'

offices are placed on upper, more private levels. A multi-level circulation area with ramps as a vertical implementation links the different levels, functions and spaces.

Curved red aluminium louvre structures serve as orientation in the building and invite people into the building through the

two main entrances. To add warmth to these light structured volumes, natural light filters through the red louvres. The scale, volume and public feel of the main entrances and circulation areas do not only function as formal entrances to the building, but also become passages through the building, which afford passersby the opportunity to interact with the

building and its users. The building not only reaches out to its users, but to the campus as a whole.

ARCHITECTS | **Cube**
Incline Architects





Taxi Terminus

The new taxi terminus on the Bloemfontein Campus is the result of requests by students for a dignified drop-off and collection point for taxi commuters.

The positioning of the new taxi terminus is in close proximity of the student centre, the Thakaneng Bridge, and connects to a paved pedestrian pathway that meanders through the entire campus, bringing students and employees in close range to their various destinations.

The structure acts as an arrival and departure node, comprising two roof elements that interlock to create a waiting pavilion surrounded by trees on the eastern side, while addressing the vehicular access road and turning circle of the taxis to the west.

The interplaying roof elements consist of a larger corrugated steel structure that starts as horizontal concrete seating, and then becomes three-dimensional, while it diagonally moulds around a penetrative concrete roof slab. The corrugated iron roof terminates as a cantilevered overhang, providing

protection for commuters upon arrival or departure.

Effective and sufficient lighting played an important role in establishing the design as a gathering place in the evenings. The design ethos of folding planes was carried through into the furniture design that incorporates light boxes, which create a playful and vibrant atmosphere at night.

The taxi terminus at the University of the Free State is the first building in the province to receive an Award for Excellence from the South African Institute of Architects. This is the highest of the accolades by which the South African Institute of Architects acknowledges the achievements of its members in the design and delivery of projects that are exemplary of the art and practice of the discipline of architecture.

ARCHITECTS | Typology





Building For Teacher Education

Central to the design of the building is a courtyard, incorporating four large trees, which will serve as a social and pedagogical space.

The new lecture halls were arranged around the courtyard to create a link between the internal and external classrooms. The entrance is a dynamic spatial progression past a tall lobby leading to the inner courtyard. The offices, boardroom and staff room are separate from the teaching spaces to maintain the required privacy and security. Offices and classrooms are accommodated in such a manner as to optimise the natural

light and ventilation. The auditorium and the laboratories are positioned on the southern side of the building, together with other service areas. The building will serve its main purpose to promote mathematics, natural sciences and foundation phase education.

ARCHITECTS | Huneberg Viljoen Architects

The entrance is a dynamic, spatial progression past a tall lobby leading to the inner courtyard.





Biotechnology Building

A need for larger undergraduate laboratories and the refurbishment of facilities necessitated extensions to the Biotechnology Building. The under-utilised area to the north of the building was the obvious choice for this new structure.

Architecturally the extension links up with the existing, predominantly white and grey buildings in the area. The exposed steel framework of the structure, the ventilation louvres on the roof and the curved corrugated iron detail to the west all contribute to the industrial ambience of the existing buildings.

The new student entrance on the west also serves as the main entrance to this building and connects with the parking area.

A portico in front of the entrance creates an assembly area for students. The new benches and trees on the pavement serve as a transitional space between street and building. The new building is linked to the existing building by means of a walkway and open atrium.

ARCHITECTS | **Reinier Brönn Architects & Associates**
Goldblatt Yuill Architects





Nursery School

The design of a nursery school on the Bloemfontein Campus was an interesting challenge, because it is not an academic building and has to consider the scale of small children.

The fact that staff as well as the public would visit the building determined its position on the campus close to the Furstenburg Road entrance. The complex was therefore divided into smaller, linear blocks around a courtyard in order to retain the school feeling, simultaneously enabling the right orientation to the north. The complex with its unmistakable look had to tie in with the new architecture on the campus, without being out of place amongst the academic buildings and sports facilities. The steel structures of the army and teachers' college in the immediate

vicinity are repeated in the steel and corrugated iron in the design, which in turn blend in with the Free State landscape.

The children will easily associate with the playful handling of the dancing columns and large imitation Lego blocks in bright colours, which lend a specific identity to the building, whilst at the same time establishing its presence on the campus.

ARCHITECTS | Smit Architects





ARCHITECTS | Bitzer Design Studio with Witthuhn Maree & Stevenson Architects



ARCHITECTS | Incline Architects

New Student Housing

This project involves a village development of four housing units for 250 students each, adding accommodation for 1 000 on-campus students at the Bloemfontein Campus.

Each housing unit was assigned to a different architectural firm and professional consultant team, resulting in four entirely different design methodologies. Each unit will host a shared public facility, i.e. a media centre, lecture hall, computer laboratory and dining hall, respectively.

A key requirement was to address the lack of involvement and connectedness to other students in the design approach. Opportunities were explored to maximise students' chances to meet fellow students and to form closer bonds with them.



ARCHITECTS | Goldblatt Yuill Architects



ARCHITECTS | Typology with TVR Architects



BLOEMFONTEIN CAMPUS |
RENOVATIONS

ARTIST | Pat Mautloa in collaboration with the Spier Architectural Arts
Melodi ya matsha (translated as the Birth of rhythm) (situated in the foyer of the Odeion)



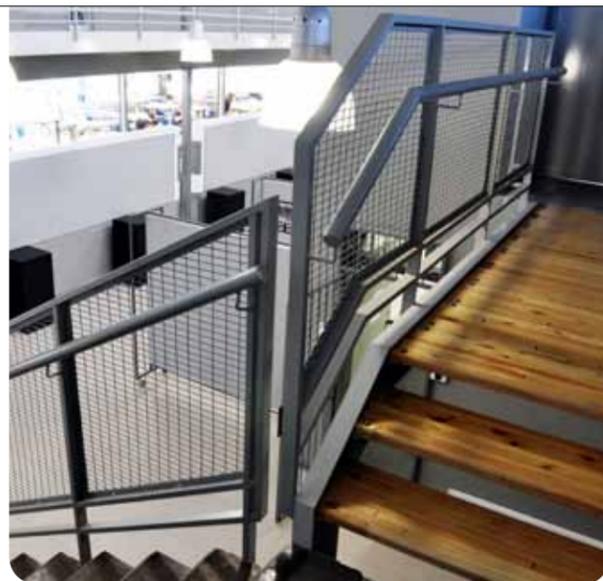
Architecture Building

The Architecture Building was initially created as a temporary structure fifty years ago. The renovation of the building was driven by mainly four objectives, namely:

- To improve the appearance of a shed-like structure in order to reflect the architectural programme it accommodates, which has achieved prestigious national standing and international accreditation
- To resolve the poor climatic conditions inside the building
- To add additional surface area to the current facility to serve as archive and research laboratory
- To provide a workshop for model building as advised by international accreditation panels during past visits

The resultant design solution opted for the insertion of a new mezzanine floor, coupled with a roof element that addresses all of the above objectives. The new roof dramatically transformed the existing shed-like exterior, while elevating the existing interior ceiling heights, and in such a way created dramatic double volumes that enhanced ventilation and provided for natural light for the interior spaces.

ARCHITECTS | Typology



PHOTOGRAPH | Stephen Collett





The exterior of the Callie Human Centre was simplified to create better harmony with the buildings in its immediate vicinity.



Callie Human Centre

With the upgrading of the Callie Human Centre, the opportunity was created to rid the building of certain aspects that were detrimental to an otherwise interesting and practical building.

The opulent use of differently coloured mosaic tiles on the exterior of the building was simplified, as well as the exaggerated decorative structural forms on the northern and southern elevations. This resulted in the building being in better harmony with the buildings in its immediate vicinity.

Changing the colour scheme of the interior of the building, together with more contemporary light fittings, floor finishes, louvres, etc. also gave the interior a more modern feel.

ARCHITECTS | **Witthuhn Maree & Stevenson Architects**





Stef Coetzee Building

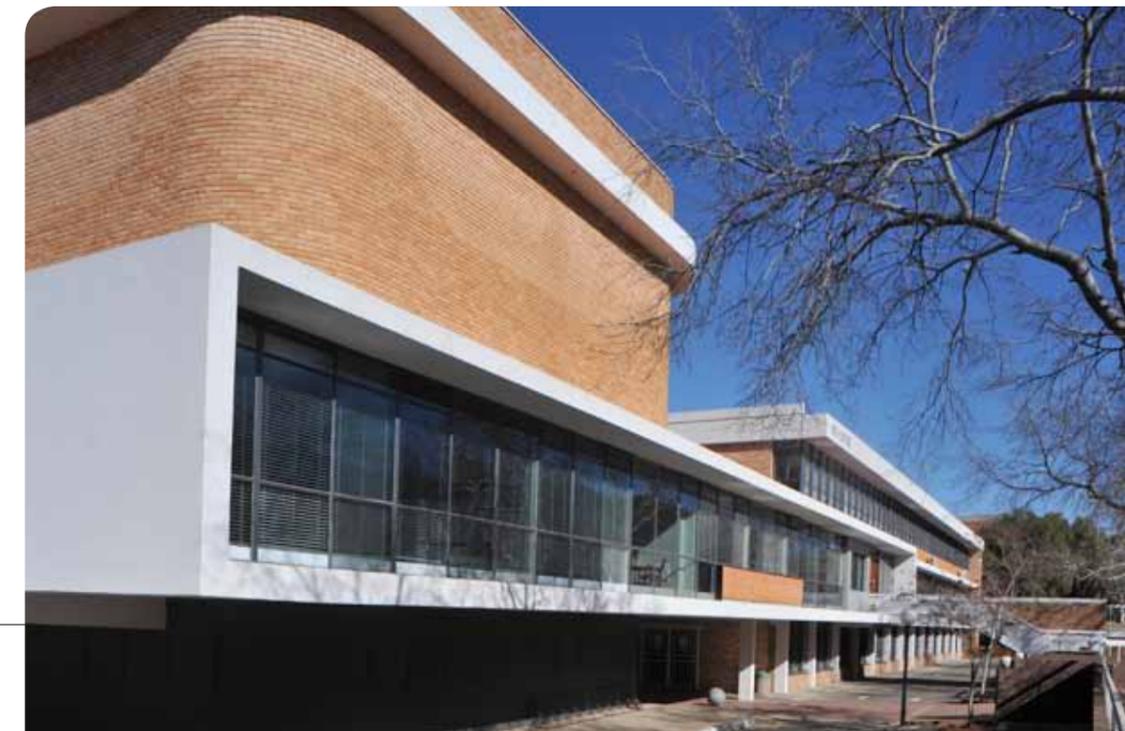
The initial brief called for the re-planning of the existing spaces within the building in order to make use of the large percentage of under-utilised areas. Part of this process involved relocating sections of the various departments housed within the building in order to maintain their own departmental identity, proximity and security.

Aesthetically, the intent of the original architect was respected as far as possible. In certain instances, this is emphasised by the dark charcoal colour on the window frames and other structural elements, thereby highlighting the contrasts between solid and void, as well as emphasising the horizontality and the "floating" quality of the white concrete, slab-like elements. This is mirrored in additions such as the ramp access.

A palate of neutral and receding colours lends a sense of greater space and volume. The neutral greys are offset with cool blue-and-white accented joinery, with a bold, graphic quality that brings life to the internal spaces.

ARCHITECTS | Sergio Nunes Architects

The intent of the original architect was respected by emphasising the horizontality and the "floating" quality of the white concrete, slab-like elements.



Pimento means “all-spice”. This name was chosen to portray the diverse profile of the university’s staff.



Staff Restaurant

An existing space was adapted on the Thakaneng Bridge to provide the staff of the Bloemfontein Campus with a place to pause (and indulge!) This new staff restaurant is called Pimento and is located on the western side of the complex in a space that has previously been used as a computer laboratory.

The project entailed a small external addition and alteration with a strong interior component. An eclectic mix of old with the new and a tongue-in-the-cheek element provide character. The focus fell on the diversity of needs – by introducing an office space as a central red ‘box’, the restaurant area was divided into two smaller spaces, one to accommodate daily users and another more private area to provide for bookings any time of the day. The enclosure of

an outside space as a courtyard created the ‘in-between’ area.

Why Pimento? More commonly known as “all-spice”, this name was chosen to portray the diverse profile of our staff – a variety of people and opinions adding spice to Kopsie life!

ARCHITECTS | Bitzer Design Studio

