# Architect and Builder

Portside 18

Military Health Base Depot 36

Jindal Mining 46

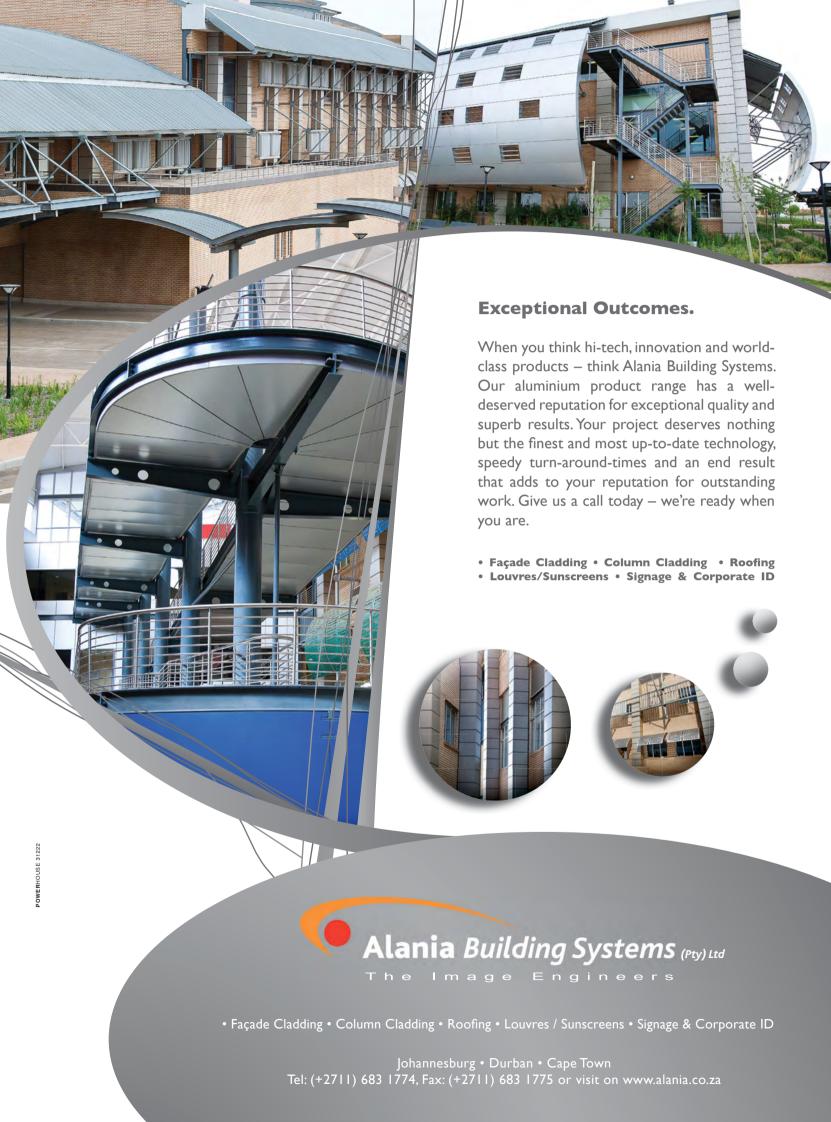
Top Billing Dream Home 56

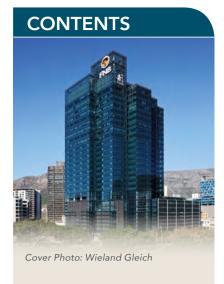
2014 SAPOA Awards 66

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# Architect and Builder

SERVING THE BUILDING WORLD FOR 65 YEARS

#### July/August 2014

Volume 65 • Issue 4

#### **PROJECTS**

#### 18 PORTSIDE

The development capitalises on the magnificent panoramas of Table Mountain and the Atlantic Ocean

#### 36 NEW MILITARY HEALTH BASE DEPOT

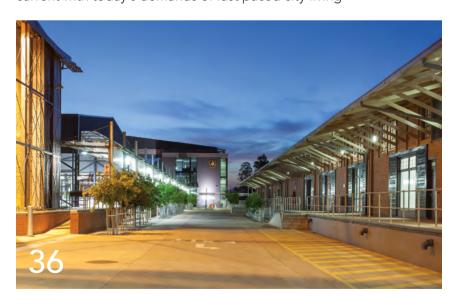
The Depot is a formation within the South African Military Health Service responsible for the acquisition, stockpiling and distribution of medical supplies and pharmaceuticals

#### **46** JINDAL MINING

The new head office is designed to cater for future expansion of the Jindal Africa group and provides a total floor area of around 4,300m<sup>2</sup>

#### **56** TOP BILLING DREAM HOME

The design expresses a distinctly modern African attitude that is current with today's demands of fast paced city living



#### **FEATURES**

#### 66 2014 SAPOA AWARDS

At the 46th annual SAPOA International Property Convention and Exhibition the winners in the various categories were announced

# EDITORIAL

Shelley Woode-Smith

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Good quality photographs are vital. Only simple and clearly drawn plans are suitable for printing. No reponsibility can be taken for lost or damaged material.

The opinions expressed by contributors are not necessarily those of the editor or publishers.

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he weather in Cape Town has veered from wonderful, sunny and wind-free days to the driving rain and howling gales that are synonymous with our winters. Rather unpleasant, particularly when one is unprepared – a yearly occurrence for me, despite being a born and bred Capetonian. I did manage to have a brief respite, however, as I went up the Garden Route to visit my parents for a week. Our erstwhile editor and her husband are thoroughly enjoying the slower, gentler life and being there always allows me to rejuvenate and relax. Thank you to Peter, our publisher, for organising this fabulous break.

Since taking over from Diana in March, I have found each issue increasingly easier to handle – this is largely due to the quality of people I have the privilege of dealing with on a daily basis. The architects, engineers and other professionals are helpful, interested and, well, professional. This is our biggest issue since the change in dispensation and I am very excited for the future. There is so much doom and gloom around – particularly, it seems, in relation to the construction industry - so it is very pleasing to see how much support we have been able to garner for the projects in this issue.

We are always on the lookout for new, suitable projects to feature and both and Louise and I have been in contact with architects and developers in this regard. My one concern, however, is that the bulk of our projects are in Gauteng and the Western Cape. I know there are noteworthy developments in the other provinces and would really love to hear about them from you. Our details are on our website.

This issue features the 139m tall Portside, a R1.6bn development in Cape Town's CBD. We also showcase the South African Military Health Base Depot in Pretoria. I was privileged to see this project firsthand when I was in Gauteng earlier this year and it is a testament to what can be created even considering the stringent security requirements of a facility of this nature. Jindal Africa, part of the US\$18 billion, diversified O.P. Jindal Group, saw the need for a head office in Johannesburg. A key aspect of the design of this building was that it should be designed around Vastu Shastra principles. Vastu Shastra is an ancient system of design and construction based on natural law. To finish off the projects for this issue is De Waterkant, an apartment in The Mirage development in the heart of Cape Town, designed for the television show, Top Billing.

Once again, we are featuring the highly successful SAPOA Awards. The quality of the winning entries is unsurpassed and every year I am blown away by the talent we have in this country.

Our next issue is a busy one – we are fortunate enough to have a presence at the Green Building Convention which takes place in September. To highlight the importance of this, we are introducing the first of our supplements, entitled, aptly, "Green". As we are all increasingly aware, sustainability is now vital and I hope we will receive a great deal of support for this supplement.

Shelley Woode-Smith

Editor

4 EDITORIAL

Shelley



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# **News**Watch



the latest news and products from the building industry and allied professions

#### **NEWS**WORTHY

#### SAVE UP TO 40% ENERGY COSTS WITH SPF INSULATION

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For more information: Lyle Broekman 021 851 8500 info@africlad.com www.africlad.com www.firstafrican.com



#### SAINT-GOBAIN GYPROC SA ACHIEVES TOP GLOBAL SAFETY PERFORMANCE RATING

It's a proven fact, safety matters to leading interior building solutions group, Saint-Gobain Gyproc South Africa. In 2013, the company achieved an impressive Zero TF1 and TF2 safety rating and as a result has been nominated to receive two "best safety" awards from their global head, Saint-Gobain worldwide.

Gyproc SA attributes its success in terms of safety in the workplace to their dedicated employees who put safety into practice through their ongoing support of the corporate commitment to the fact that safety is everyone's responsibility.

Gyproc SA has been awarded "The best safety performance for a large business" award and "The best safety improvement for a large business" award. The company has shown a major improvement in their safety rating, to an impressive "zero" incidents reported in 2013.

Saint-Gobain Gyproc SA endeavour to remain focused in 2014 and retain their zero rating through continued awareness and commitment to safety practices.

#### WALKWAYS ENHANCE UPMARKET ESTATE

Nestled along the gentle flow of the Jukskei River, Dainfern Valley Estate, in the heart of the countryside, transports local homeowners to another world where they rise to the dawning of each day as a hammerkop frolics for food and a gecko lies lazily in the morning sun. Conceptualised and developed to provide a quality lifestyle in a secure and natural environment, Dainfern Valley Estate is one of the most sought-after areas to own a home in the entire Johannesburg-Gauteng region.

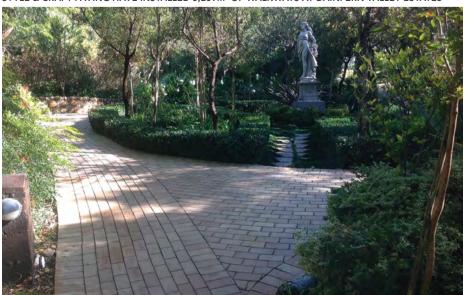
Style & Craft Paving, which is celebrating its 26 year anniversary in 2014, were contracted to lay the paving at Dainfern Valley Estates. "We started the project in November 2012," says Style & Craft Paving owner, Keith Turner, "And on top of the 5,259m² of walkways currently in place, we have also been contracted to complete 'Vincent Park' and the 'Green Belt', amounting to another 1,1km (1,439m²) of paving," he explains.

So far, a total of 231,000 Cederberg PA pavers from Corobrik have been used in a Stretcher Bond pattern with another 63,600 pavers ordered to complete the next phase.

Turner notes that the Cederberg clay pavers are the pavers of choice for the estate; "These had already been used on the walkways along some of the roads, and the quality of the pavers matches the beauty and upmarket nature of the estate."

Clay pavers are earthy and have a long life-span, and being clay with its inherent colour fastness and hard wearing nature, a decade later they look as good as the day they were laid. The Stretcher Bond pattern works well from a practical point of view as it looks neat, easily following the contour of the paths, and as Turner points out, once laid, Stretcher Bond pavers are aesthetically pleasing and give the impression of an elongated path. An added advantage is that there is no wastage of pavers. For future maintenance in the estate underneath the pathways, the clay pavers have the benefit of being able to be lifted and re-laid without any damage. www.corobrik.co.za

STYLE & CRAFT PAVING HAVE INSTALLED 5,259m<sup>2</sup> OF WALKWAYS AT DAINFERN VALLEY ESTATES



#### **NEWS**WORTHY



OPENING OF IMPERIAL WAR MUSEUM LONDON'S NEW WWI GALLERIES

As part of the commemoration of the centenary of the First World War, impressive new galleries, centred on a new atrium, have been unveiled at the Imperial War Museum. These new public spaces represent the first phase of a longterm redevelopment project, which will improve access and circulation through the museum, open the interiors to daylight and views, and create new connections with the surrounding park. The heart of the building is a generous new atrium, which provides a dramatic space in which to view the largest objects from the Museum's collection. Spencer de Grey, Head of Design at Foster + Partners: "Our project for the Imperial War Museum makes an important contribution to our ongoing work in historic buildings. We have peeled away some of the recent additions to celebrate and restore the historic architecture, opening the building up to the park and revealing the gallery levels inside an impressive new hall."

BELOW: Teddy Daka, Chairman of Aurecon, congratulates Dr Lulu Gwagwa on her appointment as Chairperson of the Board of Directors of Aurecon South Africa. In this role, she will contribute directly to the strategic leadership of Aurecon.





**STAMP HOUSE**CHARLES WRIGHT ARCHITECTS



JOCKEY CLUB INNOVATION TOWER ZAHA HADID ARCHITECTS

#### WORLD ARCHITECTURE FESTIVAL AWARDS 2014 SHORTLIST ANNOUNCED

A Buddhist temple in Singapore, an invisible eco-tourism resort in Turkey, a maritime museum in Copenhagen and the new masterplan for Gatwick Airport are among the projects that have been shortlisted for the World Architecture Festival (WAF) awards 2014 – the world's biggest architectural awards programme.



SPOTLIGHT YOUTH SPACE ASTUDIO

Taking place at this year's seventh annual World Architecture Festival, the WAF awards 2014 have attracted entries from more than 50 countries. The festival organisers, i2i Events Group, received entries from across the globe, from

**AULA MEDICA**WINGÅRDH ARKITEKTKONTOR AB



countries such as Costa Rica and Kuwait, to Japan and Jordan.

The organisers have seen a huge increase in entries from Asian countries, with projects in China, Malaysia and Vietnam up on last year by 87%, 71% and 140% respectively. The geographic spread of entries on the shortlist is further complemented by the variety of projects, from an opera house in Italy, to a variety of health facilities in Australia and a chapel in Brazil.

Buildings designed by established global practices such as Zaha Hadid Architects, OMA, Foster & Partners, BIG, Woods Bagot, KPF, Farrells, Perkins & Will and Aedas, feature in the shortlisted entries. Practices will compete across 27 individual award categories, spanning completed buildings, landscape projects and future projects, presenting their shortlisted designs live to international judging panels and delegates at this year's festival.

For the first time, this year's festival will have a separate small projects category as the judges wished to highlight design skill which had a disproportionate relationship to the physical size of a project.

AKIHA WARD CULTURAL CENTER
CHIAKI ARAI URBAN AND ARCHITECTURE DESIGN

Paul Finch, WAF Programme Director said: "From small structures to industrial complexes, the breadth of projects shortlisted this year reveals the diversity and strength of global architectural design. It also demonstrates the creativity and tenacity of the international architectural community in creating these truly remarkable schemes."

The 2014 festival is being held in Singapore for the third time, taking place between 1 – 3 October. The winners of each future project and completed building category are put forward to compete for the coveted World Building or Future Project of the Year award, presided over by the festival's 'super-jury', with the presentation of the award being the culmination of WAF 2014.

This year's 'super jury' comprises a selection of the world's leading architects and designers, led by renowned British architect Lord Richard Rogers. Rogers will be joined on the super-jury by:

- Rocco Yim (Hong Kong)
- Julie Eizenberg (USA)
- Enric Ruiz Geli (Spain)
- Peter Rich (South Africa)

www.worldarchitecturefestival.com



#### GREEN INITIATIVES GAINING MOMENTUM IN SOUTH AFRICA

Green building in Johannesburg has received a boost with the Johannesburg Stock Exchange's (JSE) listing of its first green bond. The Green Building Council of South Africa has welcomed the R1.46 billion (\$140 million) bond issued by the City of Johannesburg, which will be used to fund green initiatives.

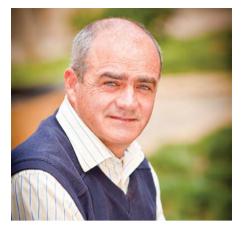
"This is great news," says Brian Wilkinson, CEO of the Green Building Council of South Africa (GBCSA). "It is exciting to see the City of Johannesburg and the JSE applying leading strategy and innovation to ensure the city's sustainability and its increased energy efficient operation, through green projects."

Of the C40 Cities Climate Leadership Group, Johannesburg is the first to issue a green bond. Wilkinson praised last week's announcement that funding from this green bond would be used for low carbon infrastructure, minimal resource reliance and increased natural resources, in line with the city's climate change mitigation strategy.

He notes it is one of many signs that green initiatives are clearly gaining momentum in South Africa.

In addition, four of the winners in the seven local main categories of the South African Property Owners Association (SAPOA) Innovative Excellence in Property Development Awards 2014 were GBCSA Green-Star SA rated buildings.

Johannesburg's green bond, referred to as COJGO1, will be used to fund climate change mitigation strategies



BRIAN WILKINSON CEO, GBCSA



especially those that include greater use of gas and natural energy. One of the city council's green programmes include the installation of 43,000 solar water heaters by City Power that will collectively save the equivalent of 22.5GW-hours of electricity a year, enough to run a small town.

The Green Building Council South Africa leads the transformation of the South African property industry to ensure buildings are designed, built and operated in an environmentally sustainable way.

"This green leadership that this bond represents is commendable," says Wilkinson. "We encourage cities and towns throughout South Africa to consider green solutions, which will allow them to benefit from greater environment sustainability." www.gbcsa.org.za

BELOW: Marking a bold new direction for South Africa's largest non-bank home loan service provider, SA Home Loans R150 million new head office on Durban's up-market La Lucia Ridge was officially opened by Sim Tshabalala, CEO of Standard Bank Group and Kevin Penwarden, CEO of SA Home Loans. The striking, high tech, energy efficient development, built on one of the last remaining undeveloped sites on the ridge, was managed and constructed by JT Ross, with design by Dean Jay Architects in association with Paul Nel Architects, with space planning and interiors by Paul Nel Architects.



#### **NEWS**WORTHY

#### MARRIOTT COMMUNITY PARK DEVELOPMENT: OLD MAIN ROAD GETS A FACELIFT

Commuters driving along Old Main Road in Hillcrest would have seen a huge change in the aesthetics of the verge outside the headquarters of Marriott. Covering an area of 1,000m², the entire length of the verge from the traffic lights to the end of the Marriott property has been transformed into a garden.

Since moving to Hillcrest in 2009, Marriott has been actively involved in the local community, with sponsorships of various projects in the Shongweni Valley Community, Hillcrest Aids Centre Trust as well as various Hillcrest sporting clubs. Marriott has continued their community drive and has now incorporated the development of a community park and garden along Old Main Road.

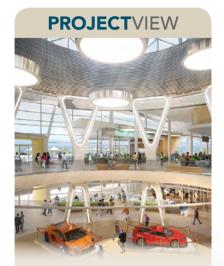
To create the community park, several alien trees were removed and a fence erected along the perimeter. Marriott commissioned local specialist landscaper, Christopher Dalzell of Christopher Dalzell Landscapes, to design and landscape a water-wise indigenous verge garden along the entire length of the property. The mandate specified that the garden should be bold, colourful, water wise and provide interest throughout the year. A wooden staircase was built to provide access for the public from the street, and over 5,000 indigenous plants planted. Marriott requested that these plants be indigenous and waterwise and where possible, maintenance free. Many of the plants will flower in winter when colour is needed. In total, over 40 different species were planted.

Marriott plans to complete the park during 2014 with the addition of a joggers'/ dog walkers' fountain, benches and the planting of additional indigenous trees.



# ProjectWatch | | | |

proposed, current and future projects from Southern Africa and abroad



#### MALL OF THE SOUTH

Developed by Zenprop and opening in September 2015, the 65,000m<sup>2</sup> Mall of the South, located on the corner of Swartkoppies Road and Klipriver Drive, will be the new regional mall for the southern Johannesburg trade area.

Designed by Vivid Architects, a timeless design element will be seen; combining natural and crisp, metallic finishes, well-proportioned shop fronts, double volume spaces and daylight streaming in from the magnificent skylights.

The developer has made parking top priority as research has shown it is a major contributing factor when choosing a regional shopping centre. The parking structure is highly conducive to convenience with easy access and traffic flow taking shoppers into a three level car park connecting them to their level of choice. Intelligent parking systems will navigate shoppers to convenient parking spaces.

The tenant mix has been carefully selected to reflect the needs of the catchment area comprising the full spectrum of South Africa's major and national retailers.

Developer: Zenprop Architects: Vivid Architects Completion: September 2015 Value: R1.8 Billion

# New Global Head Office for Discovery

Discovery is set to have a new resource-efficient, cost-effective and environmentally-sustainable global head office in Sandton. It is the largest single commercial office development in Africa, and also one of the most innovative.

The developers are delivering a purposedesigned, ground-breaking green building, which is highly efficient, accommodates Discovery's future growth and ensures the best use of resources.

Discovery's new 87,000m² headquarters will be situated on the corner of Rivonia Road and Katherine Street, diagonally opposite Sandton City and a short walk away from the Sandton Gautrain Station. Designed by Boogertman & Partners, the building will comprise two wings with eight floors of offices plus a ground floor and a feature roof level. It will also offer nine basements with over 5,100 parking bays.

The property is owned by Growthpoint Properties (55%) and Zenprop Property Holdings (45%). Discovery is expected to take occupation on 1 January 2018. Its initial lease period is for 15 years with the option to renew.

From its design to construction and operation, sustainable development is a key priority. The building has been designed to incorporate a Green Building Council South Africa (GBCSA) green building accredited rating of five stars.

Growthpoint Properties Office Division Director Rudolf Pienaar says: "The new Discovery head office will be one of the most environmentally sustainable and



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efficient buildings in Sandton. It is also set to become a landmark on the Sandton skyline. Green building plays a key role in providing spaces in which businesses can thrive. For Discovery, it will create a stimulating working environment and reduce building utility costs with sustainable alternatives."

"Offices should integrate flawlessly into our clients' businesses and provide people with a positive, healthy and energising environment," says Pienaar. "This means creating user-friendly offices and solutions through innovation and creative design that push the boundaries. Working with Discovery has created the foundation for an operationally efficient, sustainable building that promotes increased staff retention and productivity, improved asset performance, reduced operational costs and much more."

Zenprop Property Holdings CEO, James Tannenberger says: "This iconic building will be the largest single office development to take place in Africa. Accordingly, we have assembled a highly skilled project team in order to meet the inherent demands of a complex and multi-faceted delivery process, whilst integrating Discovery's specific requirements into the broader planning and design processes. This will ensure that this prestigious development meets the unique business needs of Discovery, now and into the future."

The new head office will provide many unique advantages for Discovery. It will serve as the company's hub for its growing international business. It will bring all of Discovery's more than 5,000 Sandton-based employees under one roof, instead of the current situation, where employees work across four buildings. Earthworks for the development are well underway.

Developer: Growthpoint Properties; Zenprop Property Holdings Architect: Boogertman & Partners Main Contractor: WBHO and Tiber in a JV Estimated Completion Date: Early 2018

#### **PROJECT**VIEW



#### WATERSTONE BUSINESS PARK, CAPRICORN PARK

FWJK Quantity Surveyors has followed up on the success of it's R200 million Touchstone House development currently under construction in Bree Street, Cape Town, with the launch of a new mini factory development at Capricorn Park to be known as Waterstone Business Park.

The 5,600m² industrial development will comprise 13 mini factories varying in size from 289m² to 607m² in a location that is proving popular for industrialists wanting to relocate to avoid traffic congestion whilst having the benefit of a large labour pool nearby.

#### Developer:

FWJK Developments

#### Architect:

Tim Hughes Architect

#### **Quantity Surveyor:**

FWJK Quantity Surveyors

#### **Structural Engineer:**

Bergstan Consulting Engineers

#### **Electrical Engineer:**

Converge Consulting

#### NEW STUDENT CENTRE, UNISA REGIONAL CAMPUS, POLOKWANE, LIMPOPO

The construction of a new seminar room for the students and offices for their use is underway.

Client: UNISA

**Architects:** Prism Architects

**Quantity Surveyors:** 

KC Maiwashe and Associates

Consulting Structural & Civil

Engineers: Nyeleti Consulting

Main Contractor:

Matakanye Construction

Value: R54 million

Commencement: December 2013

Completion: ± March 2015

(Leads to Business)

PROJECT WATCH 11



#### **NELSON MANDELA CHILDREN'S HOSPITAL, BRAAMFONTEIN**

Article written by Rod McAllister, Partner at Sheppard Robson Architects, London and Lead Architect of the Nelson Mandela Children's Hospital.

The Nelson Mandela Children's Hospital - for which construction will begin in August this year - has been designed with such care and attention to detail, it could have been imagined by one of the children who will one day get well within its walls. The result is a first-of-its-kind hospital for children in South Africa.

From the start of the project, Nelson Mandela always emphasised the need for the building to feel like his home, and not like a hospital. As architects, collaborating between South Africa and the UK, our intention from the outset was to create a design that embodies the way that children react to Madiba. With this in mind, we visualised a space filled with art, colour and surprises.

In every aspect of the design, the building puts the children and their families first. We have also taken special care to consult paediatric nurses, doctors and therapists who have comprehensive experience and understanding in what the children would need to have a comfortable, positive stay at the hospital.

We plan to decorate the walls with local South African artworks, as well as pictures by the children themselves. For example, at the beginning of the project we received a tile imprinted with the outline of Nelson Mandela's hand, so we plan to give each child a colourful ceramic tile, which they can imprint with their own hand and display on one of the hospital walls next to Madiba's original. This will commemorate their time there long after they have healed.

We are mindful that not all children at the hospital will be very young, so we have ensured the decoration does not resemble a nursery. We are investigating innovative ways of allowing the children to communicate with each other using bedside technology, giving them their own hospital social network.

All the wards are on the first floor level with low-set windows that look onto views

over Parktown, Wits University and the green courtyards. The result is a space that is open, bright and non-institutional.

.....

We have strived for best practice in sustainability in all aspects of the design. As much of the hospital as possible is naturally day lit and ventilated and the structure is insulated to very high standards. All rainwater is collected. stored and reused. While the building already meets local regulations, with enough funding we are confident we could be LEED Gold certified. LEED is a green building tool that addresses the entire building lifecycle recognizing bestin-class building strategies. Ultimately, the most sustainable buildings are those that are used effectively and serve the people they are intended for, a milestone that we have already achieved.

As a referral hospital, the Nelson Mandela Children's Hospital will not replace other resources. Rather, it will be a welcome specialist addition to existing facilities in South Africa. With its clay-brick structure and lush gardens filled with newly planted trees, the building has been welcomed as a new addition to the community by local Parktown heritage groups.

Once complete, we can look forward to a warm, ground-breaking space that not only promises to never turn a child away, but give them the nurturing care and surroundings to help them get better quicker.

Project Managers: SIP Lead Architects:

Shephard Robson International
SA Architects: GAPP; Reuben Reddy
QS: Mbatha, Walters & Simpson
Main Contractor: Group 5
Completion Date: 1st quarter 2016

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#### NEW OFFICE BUILDING IN GROENKLOOF, PRETORIA

The introduction of higher density development into residential neighbourhoods is always a challenge. It is usually met with disparity from the community and the notion that it will negatively affect the neighbourhood.

#### Planning

The outset of this project is no different. It involves the design of a new office building for Volumode (Pty) Ltd in Groenkloof, Pretoria, an established residential neighborhood. The property borders George Storrar Avenue, a busy road connecting Fountains Circle with the business hub of Brooklyn Circle. Due to the high traffic flow of this road, existing properties alongside it no longer offer a desirable residential environment, resulting in many of them being transformed, at low cost, into offices. The result is a currently, visually un-appealing and unplanned, architectural theme. The latest City of Tshwane's Spatial Development Framework identifies this strip of residential properties bordering George Storrar for higher density development, to act as a buffer between residential and commercial property use.

This project will be the first where the existing building is not transformed, but replaced with a new building designed for the sole purpose of accommodating offices. The planning process involved rezoning the property from Residential 1 to Business 4, with the resulting changes in coverage and floor space ratio. The planning and re-zoning was done in consultation with the Groenkloof Home Owner's Association (GHOA). Approval for demolition of the existing house older than 60 years was obtained from the Provincial Heritage Recourses Authority on grounds that it had no significant PROJECT WATCH

architectural value. The proposed design was favourably received by the GHOA, with the hope that this will set the architectural theme for future projects of a similar nature.

#### Design

The brief from the client was for new cost-effective headquarters in a building of  $\pm 500 \, \text{m}^2$ , with sufficient parking, and street appeal. Accommodation requirements were reception and waiting area, conference room, executive offices for management, a server room and a security gatehouse.

The proposed building is designed to be functional and energy efficient. It utilizes the rezoned coverage and FSR zoning of the property fully with a resulting 590m<sup>2</sup> total floor area. The building is positioned to provide guest parking close to the street entrance and covered employees parking out of sight.

A central courtyard allows maximum daylight usage and minimum need for mechanical ventilation. North windows are provided with sufficient sun control measures to reduce heat gain; while east, west windows are minimal. Low maintenance finishes include flush jointed brickwork and exposed off shutter concrete. Painted walls are only used as focal elements. Double glazed aluminium framed windows further helps with energy efficiency.

#### Architects:

Mellet & Human Architects
Town Planners:
Origin Town Planners
Quantity Surveyor:
Letitia Wannenburg
Engineer:

Eli Coetzee Consulting Engineers

#### **PROJECT**VIEW

#### SPATIAL LEGACY PROJECTS UIA2014 DURBAN

The Durban City Architecture Department was a key supporter of the UIA 2014 Bid. In a Celebrate Cities competition, together with the KZNIA, they identified long aspired to projects to provide 'acupuncture' points in the city's development. The following Spatial Legacy Projects have been developed to tie in with the themes of Resilience, Ecology and Values:

#### Pixely ka Seme Linear Park

The City has long envisaged a pedestrian route connecting Warwick Junction in the West to the Beachfront in the East. In the long term a linear park redefining the perception of the Inner City as an economic, social and cultural centre for the City is proposed. Step One is to activate a 400m stretch of the road with a full-scale demonstration of the experience and an exhibition documenting future plans.

#### **River Town**

A sub-terranean canal runs along John Milne Street and drains into the harbour at Cato Creek. The activation for the UIA 2014 event entails lifting the lids on a stretch of the canal and to refurbish an exhibition hall in the Beer Hall building adjacent to the canal.

#### **Pocket Parks**

This is an initiative to find opportunities for delight in the urban fabric through temporary or permanent 'pocket' parks. The parks demonstrate the principles of urban greening, medicinal plant growing, indigenous gardening and urban agriculture. As with all the projects the intention is to grow accessible and enjoyable public spaces in a City.



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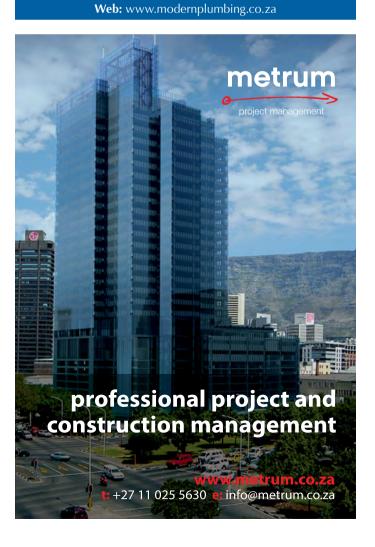
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#### **PROJECT**



#### **Portside**

The development capitalises on the magnificent panoramas of Table Mountain and the Atlantic Ocean while complementing the beauty of the Mother City

PHOTOGRAPHY BY FRANCOIS POTGIETER, RAPHAEL HELMAN, WIELAND GLEICH AND KEITH QUIXLEY

#### PORTSIDE

Cape Town

#### CLIENT

FirstRand Bank Old Mutual

#### **DEVELOPERS**

Eris Property Group Old Mutual Property

#### **ARCHITECTS**

dhk Architects Louis Karol

#### PROJECT MANAGERS

SIP Project Managers Absolute Project Management Metrum Project Management

#### QUANTITY SURVEYORS

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**ENSAfrica** 

#### MAIN CONTRACTOR

Murray & Roberts Western Cape

he new Portside building encapsulates the energy of a rapidly evolving worldclass city, with progressive architectural design features, inspired by a firm commitment to sustainable and responsible development, within a unique location and landscape.

#### ARCHITECTS' REPORT

As a joint initiative between Old Mutual and FirstRand Bank, this R1.6bn project represents a substantial investment into the Western Cape and has already become a landmark in the Cape Town's central business district. In terms of the co-development and ownership agreement concluded in early 2011, the concept behind Portside was to create a tall commercial development, sectional titled to both of these major South African corporate institutions.

Jointly managed by Old Mutual Property and Eris Property Group, the development is strategically situated within the emerging financial district, in the northwest corner of the CBD. Comprising a full city block of 6,500m<sup>2</sup>, bordered by Buitengracht Street, Hans Strydom Avenue, Bree and Mechau Streets, the site is located on a key nodal and arterial intersection that had already been approved for a tall building.

This emerging precinct houses a cluster of newly established medium high-rise buildings as well as several under development. In acknowledging its prime location at the apex of the precinct, Portside and the surrounding future developments would need to create the critical mass of related activities, intended to revitalize this part of the city. As the location is also part of the Central City Urban Conservation Area, the relationship with its historical context and urban ecology was also a crucial design consideration.





The visual impact of the building was carefully considered to create a legible identity on three scales; those of the distant, middle and immediate perspectives





Intended to be an urban marker, the building also needed to respond to its context in the greater CBD as much as the local precinct and its immediate surroundings. As such, the design addresses the building's urban form, through its massing, height and composition, as well as its relation to the urban environment. Furthermore the concept needed to address the building's urban functioning in terms of movement systems, public space, land use and building interface. The visual impact of the building was therefore carefully considered to create a legible identity on three scales; those of the distant, middle and immediate perspectives.

As FirstRand and Old Mutual had agreed to be equal participants in this sectional title

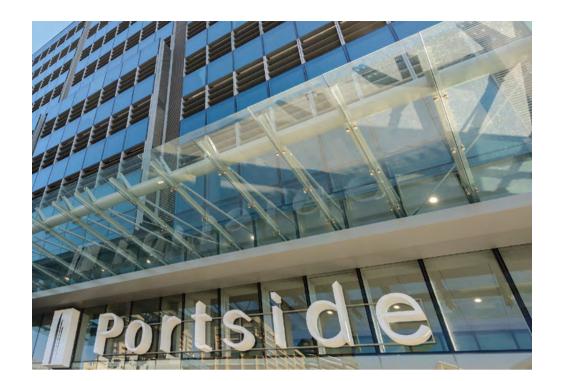
development, but with each having different functional requirements, a somewhat complex sectional title register has evolved in the final built form of Portside. One of the key requirements of the brief therefore was for the development to have two clear and legible addresses for its respective corporate owners. This was achieved through the creation of two separate entrances and foyers on opposite sides of the building, each with its own plaza with Old Mutual's off Bree Street, whilst the FirstRand entrance is located off Buitengracht Street. In addressing the cross fall over the building's footprint, the vehicular entrance for the parking and service vehicles is located on the upper ground level off Mechau Street.

The character of the built form was paramount, in particular the height, massing and proportion. Notwithstanding rights up to 147m in height, it was felt that a slightly lower tower was more appropriate to the nature and character of the precinct, as well as to reduce the visual impact of the building in relation to the larger urban and geographical context of the city and Table Mountain.

The architectural quality, material and detailing of the building were crucial, not only in terms of the external envelope - particularly the relationship to the public realm where street level activation, scale, legibility and permeability are key drivers in addressing social context and urban regeneration - but also in terms of the indoor spatial environment from the perspective of occupant comfort.

Portside was designed as a benchmark of integrated sustainability and to raise the standards of design, indoor environmental quality as well the reduction of energy,





As a joint initiative between Old Mutual and FirstRand Bank, this R1.6bn project represents a substantial investment into the Western Cape

potable water consumption, storm water runoff, waste production and negative emissions for tall buildings.

This development capitalises on the magnificent panoramas of Table Mountain and the Atlantic Ocean while complementing the beauty of the Mother City. Recently completed, it now houses the provincial headquarters for the three divisions of FirstRand Bank, namely First National Bank, Rand Merchant Bank and Wesbank, whilst the remaining office space is currently being negotiated as rentable office space. In addition, a new state-of-theart First National Bank branch is located on the ground floor along with various retail and restaurant outlets.

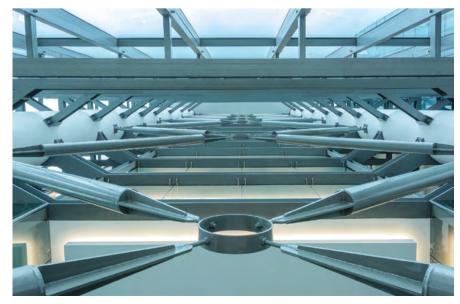
#### Planning

At 139m tall, with a gross construction area of 114,547m² over 32 floors, Portside offers over 57,000m² of rentable area, including an easily accessible 1,430m² of retail on the ground level as well as 1,444 parking bays. Vertically, Portside has a simple stacking logic, comprising basement parking, the public interface at ground level, podium parking, 20 floors of office space and the crown of the building which houses plant and service equipment.

The basement, comprising three levels of parking, is for Old Mutual tenant use and has fresh air supplied naturally, via large intake grilles positioned over the plaza areas off Hans Strydom Avenue. The seven podium levels of parking are shared by FirstRand and Old Mutual, with service plants for the Old Mutual floors also located in a double volume zone spanning over the 6th and 7th floors.

FirstRand occupy the entire 8th Floor, starting with a double volume foyer, known as the sky plaza, along with a North facing terrace, occupying the entire Hans Strydom elevation. On this floor are also twinned conference rooms, linked via stackable acoustic doors, various meeting rooms enclosed with frameless glass walls, the staff restaurant with full commercial kitchen facilities as well as a terrace, and the staff gymnasium.

The 20th to 27th Floors are FirstRand floors on which their various departments are located, with the executive level - complete with boardrooms, catering facilities, bar and social areas as well as terraces facing both Table Bay and Table Mountain – on the 28th floor.



With Portside being located in arguably the most prominent position in terms of arrival to the city it was important that its appearance be as light, transparent, harmonious and unobtrusive as possible, despite its bulk

The 9th to 19th floors are all open plan rentable office space belonging to Old Mutual, and the 29th to 31st Floors are dedicated to service plant.

In order to access these levels, whilst addressing vehicular and pedestrian approach, corporate security and dual entrance addresses, the core of Portside accommodates a complex array of lifts. Both owners have dedicated shuttle lifts which link their respective parking floors to their foyers, and the office floors are then serviced via six dedicated lifts each. Portside has a total of 22 lifts altogether, including a service lift and fireman's lift.

Although both FirstRand and Old Mutual specified 2,700 mm clear floor to ceiling heights on their respective floors as well as 800mm deep ceiling voids for service reticulation, FirstRand further stipulated that their portion of the building be fitted with 250mm deep raised access flooring for additional electrical and data reticulation, whilst the rentable floor plates of Old Mutual received only a cement screed finish. The effect of this is that the floor to floor height of the tower changes from 3,850mm to 4,050mm from the 20th floor upwards. The additional height is taken up in the spandrel panels of the curtain wall, between the floors. Interestingly, this is not perceptible in the external elevations.

#### Facade

From the outset, Portside was intended to be clad with a fully glazed curtain wall façade. As a contemporary material with almost limitless

scope, glass typifies the nature of the building as a AAA grade office environment and as a corporate head office. With Portside also being located in arguably the most prominent position in terms of arrival to the city as well as it being intended to be the tallest building in the city, it was important that its appearance be as light, transparent, harmonious and unobtrusive as possible, despite its bulk.

The initial proposals for Portside depicted a light grey, silvery metallic hue to the glazed façade. However, on viewing full-scale samples under various weather conditions it was noted that the grey body tint appeared at times far darker than anticipated. Considering the sheer volume of Portside, an Azure glass was proposed by the architects as a more appropriate solution that would appear less harsh and imposing.

The fenestration requirements for Portside were to both capitalize on the spectacular 360 degree views of the city, particularly when viewed from a height, as well as to maintain an optimally comfortable working environment through an efficient integration of the façade with the HVAC and lighting systems.

Although architecturally conceived as a fully transparent curtain wall, the initial façade concepts struggled to comply with the thermal mass that would be required in relation to the mechanical requirements, which placed limitations on the extent of vision glazing achievable. A portion of the northern and western façade therefore needed to be glass cladding over an inner thermal skin. Through an extended design development process,



the HVAC plant and associated shaft areas were adjusted to the point that the extent of vision glazing was maximized without exceeding rational HVAC cost allowances.

As environmental concerns were also a key consideration in both owner responsibility as well as tenant attractiveness, the design of the façade initially employed energy-saving measures such as aluminium light shelves within the façade glazing system, which reflect transmitted light into the deep space on the floor plates, effectively contributing to reduced life cycle costs.

This was a finely balanced exercise as the financial viability of the project placed constraints on undue design generosity on any of the above elements. As such the glass selection criteria was paramount in the integration of the building's skin with its inner support systems.

It was finally resolved that Portside be glazed predominantly with 8mm Sunergy Azure heat strengthened glass. The transparent areas in the façade furthermore utilize a double glazed construction, with a 6mm clear inner pane and a "Low-E" coating incorporated within the cavity of the double glazed unit. This has optimized the thermal and acoustic insulation properties of the vision panels, which typically extend from ceiling level down to a cill level of 750mm above floor level on the Hans Strydom Avenue & Buitengracht Street façades, whereas on Bree & Mechau Street elevations, the vision panels have been extended down to 250mm above floor level on the Old Mutual floors

and, due to the raised access floors on the FirstRand levels, they are flush with the floor.

The spandrel panels, being the horizontal components of the curtain wall which bridge the floor slab edge and the ceiling void, (as well as the stall riser below the window cills, where full height vision panels do not occur), provide a 80mm air gap between the glass pane and an aluminium back panel, which is in turn backed by 60mm mineral wool insulation. The internal skin behind the curtain wall is a composite drywall construction, which is independently fixed to the structure of the building. This drywall skin also acts as the fire break between floors.

With the low shading coefficient of the Azure glazing, HVAC capital and life cycle savings will be achieved. Since the Azure glass also has a high Visible Light Transmittance, it was rational to omit the proposed aluminium light shelves as initially designed into the vision panels. This had the added benefit of improving the extent of visible panorama perceived from within. Here as well, there will be savings in both the lighting capital and life cycle costs.

The parking podium is also glazed as far as possible, so as not to lessen the impact of the fully glazed tower. Whilst no special properties in terms of thermal performance are required here, a fine balance was achieved to provide sufficient open area in the façade to comply with smoke evacuation and natural ventilation over the large floor plates, whilst still complying with public safety regulations in terms of balustrade height.

From the outset, Portside was intended to be clad with a fully glazed curtain wall façade. As a contemporary material with almost limitless scope, glass typifies the nature of the building as a AAA grade office environment and as a corporate head office.



The achievement of 5 Star Green Star SA rating is a testament to the vision of responsible clients



#### PROJECT MANAGERS' REPORT

The project management team, comprising SIP Project Managers, Absolute Project Managers and Metrum Project Management, was appointed in late 2010.

The roles and responsibilities of the three firms were identified at the initial stages of the project and implemented through to project completion.

The project managers embarked on developing a Project Initiation Programme and an Indicative Construction Programme that were used as the baseline planning and programming tools for the project. The programmes were presented to the joint developers as well as to the consultants to obtain their buy-in and commitment to the plan and programme.

The programmes addressed the different risk profiles based on various scenarios which gave due consideration to the development rights applicable to the project site and the processes required to have amendment rights approved in order to allow construction, procurement of contractors and construction phase milestones.

The project managers participated proactively and in detail with the Quantity





At 139m tall, with a gross construction area of 114,547m<sup>2</sup> over 32 floors, Portside offers over 57,000m<sup>2</sup> of rentable area

Surveyors in the preparation of the Principal Contract Conditions of Contract as well as the selected subcontractors Conditions of Contract, thus ensuring that all the necessary applicable requirements were clearly identified in the tender documentation. This provided the contractor with as detailed as possible knowledge of the building in order to allow a competitive tender outcome to take place.

The progress made in relation to the programmes was carefully monitored in order to achieve the objective of the bulk earthworks and lateral support commencement in August

2011, followed by the commencement of the Principal Contractors works scheduled for November 2011.

The client's decision to proceed with the Design and As-built Green Star applications to the Green Building Council South Africa required an approach by the various consultants to address their designs, informing the tender documentation at an early stage. This was significantly ahead of when the actual appointment of the subcontractor would have been required in terms of the construction programme, this programming necessitated by the need



One of the distinguishing features and innovations in Portside is the application of LED light fittings throughout the entire building



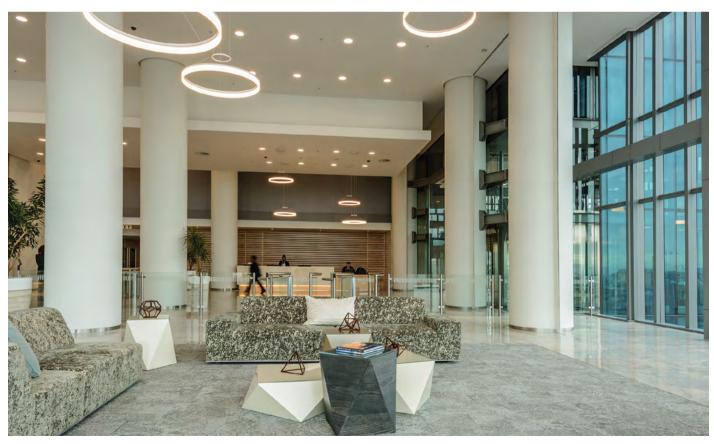
to prepare the applicable documentation required for the design rating submission to GBCSA to be taken as early as possible.

The further benefit of the early tendering and appointment resulted in the preparation of shop drawings and equipment submittals taking place earlier on, thus negating the 'just in time' tendency that occurs on projects.

The implementation of regular weekly meetings with the clients representatives interspersed with regular monthly management and cost reporting meetings

allowed the project to be managed with a hands on approach, whereby potential problems were identified as early as possible and dealt with in order to avoid potential negative impacts later on in the lifespan of the project.

The implementation of a change control process requiring the identification of costs to any potential design changes and presenting these to the clients on a weekly basis for sign off and acceptance allowed the project to proceed smoothly. As a result, the monthly







Portside houses the provincial headquarters for the three divisions of FirstRand Bank, namely First National Bank, Rand Merchant Bank and Wesbank

management and budget meetings essentially dealt with costs reports being presented that accounted for all the decisions made over the preceding 3-4 week period and the record of the project progress as identified at the prior regular weekly meetings.

Similarly, meetings with the contractor were held regularly and were supplemented by ad hoc meetings to discuss specific project related issues well ahead of these potential issues becoming problematic. This proactive approach resulted in a minimum of

contractual claims being tabled and a highly workman like professional approach being taken by the contractors representatives and the project management team including the consultants and the client leading to its successful conclusion.

#### ACOUSTICS ENGINEERS' REPORT

The acoustics and noise control design aspects of a 143m tall building such as Portside were more difficult to deal with than generally perceived.



#### **KEY TO PLANS**

#### **PARKING LEVEL 2**

- 1. FirstRand Jockey Lift Lobby
- 2. Old Mutual Jockey Lift Lobby
- 3. Parking Floor

#### FLOOR 8: SKYPLAZA

- 1. FirstRand Jockey Lift Lobby
- 2. Reception
- 3. FirstRand Office Lift Lobby
- 4. Sky Plaza
- 5. Semi-enclosed terrace
- 6. Welcome Centre
- 7. Meeting Rooms
- 8. Wellness Centre (Gym)
- 9. Kitchen
- 10. Canteen
- 11. Outside Terrace
- 12. Divisible Function Rooms

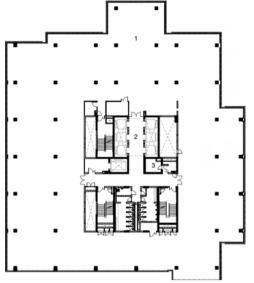
#### FLOOR 22: TYPICAL FIRSTRAND OFFICE FLOOR

- 1. Office
- 2. FirstRand Office Lift Lobby
- 3. Tea Kitchen

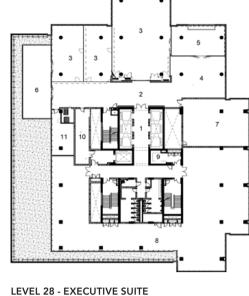
#### FLOOR 28: EXECUTIVE SUITE

- 1. Firstrand Office Lift Lobby
- 2. Arrival Area
- 3. Divisible Function Rooms
- 4. Bar
- 5. Semi-enclosed terrace
- 6. Outside terrace
- 7. Boardroom
- 8. Work Café
- 9. Tea Kitchen
- 10. Finishing Kitchen
- 11. Store





**LEVEL 22 - TYPICAL UPPER OFFICE FLOOR** 



Due to the height of the building, the HVAC could not be located entirely in the basement or on the roof. This would compromise the system's energy efficiency. Thus, the cooling machinery and ventilation components of the system are at the top, halfway up the building, as well as in the basement.

Acoustics in the basement were not a top priority, but care had to be taken higher up the building where machinery was located near to offices. Plant rooms were also often no more than 50m away from the façades of adjacent hotels and residential buildings. In addition, consideration had to be given to the fact that future new building work in the vacinity might be affected by the HVAC systems on top of Portside. Therefore, noise control of the HVAC plant room equipment was very much

required, both for occupants and the public. The chiller rooms and air-handling units were insulated, but the challenge was still allowing airflow without compromising the façade.

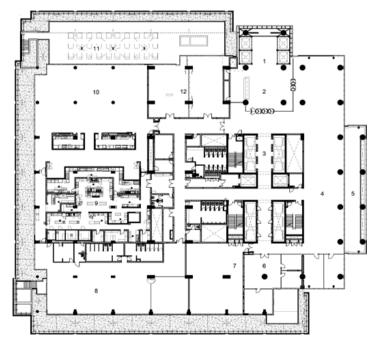
As all soil and potabale must descend to the ground from tanks and sumps, it was also important to ensure that all unducted pipe work for water and sewage was suitably routed and insulated to achieve noise control.

Due to its extent, the glass façade moves with changes in temperature. Consequently, the interior floor slabs could not be sealed horizontally to the glass façade or the spandrel panelling. Thus, consideration was given to the fact that noise might travel from above the slab to the ceiling of the office below. A good relationship with the façade engineers was important to resolving these issues.





LEVEL 8 - SKY PLAZA



Good acoustics in the offices and common areas was important. The acoustic engineers worked with the interior designers to ensure their designs took this into consideration.

#### **SUSTAINABILITY**

Initially the Portside project aimed for a 4 Star Office Design rating, however the clients saw the opportunity to raise the benchmark for this AAA grade commercial development, and the professional team were able to achieve a 5 Star Green Star SA (GSSA) v1 Office Design rating, representing "South African Excellence", as administered by the Green Building Council South Africa (GBCSA). This is especially significant as Portside is the first tall building in the country to receive such certification. At the time of writing, the building is being assessed for a 5 star Green Star As-Built rating.

Portside has focused on the environmental initiatives associated with GSSA projects, including energy reduction through an efficient air conditioning system; the capturing, storage and reuse of rainwater as well as grey water for use in toilets thus reducing potable water use; the use of low embodied energy materials such as recycled reinforcing steel and cement replacement with industrial waste products; and the maximisation of natural light through the provision of a double glazed façade.

One of the distinguishing features in Portside is the application of LED light fittings throughout. This significantly lowers the energy consumption and is a first for any office building in South Africa. Furthermore, the energy use for all areas, including parking, is minimised, and ultimately eliminated when they are unoccupied, through the provision of movement sensors. In addition, the façade

has been designed for disassembly, with each component of the façade panels having been marked in accordance with a disassembly plan, which identifies the sequence of removing each panel for later reuse on another building or recycling. This is also understood to be a first for a tall building in South Africa.

Within the parking podium and basement, included in the 1,440 parking bays are 70 parking spaces dedicated for the use of hybrid or alternative fuel vehicles, as well as 70 motorbike bays. Approximately 20% of these hybrid/alternative fuel vehicle bays are provided with electric car charger points with infrastructure for addition points, to allow for onsite recharging. These bays are all located in areas closest to the lifts and lobby access.

There is also secure bicycle parking for ±220 building staff and visitors. A cycle route is clearly marked and signposted to facilitate safe and easy access to cyclists. Shower and change facilities are also provided for cyclists, adjacent to the bicycle parking area. These facilities include a total of 21 showers and 174 lockable lockers, some of which are fitted with bicycle battery charge facilities.

In addition to the 227 bicycle racks for staff and visitors, a number of community bicycle racks have provided on the pavement at street level aimed at encouraging alternative means of transport for business people, personal use, tourist and couriers in the lower CBD. This is in support of the City of Cape Town's non-motorised transport strategy and Ride Your City initiative.

The achievement of 5 Star Green Star SA rating is a testament to the vision of responsible clients, who appreciated the value of the rating, not only to the environment, but also to their own investment.



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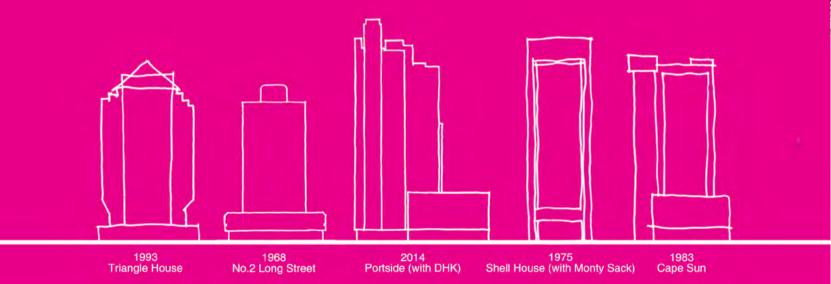
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SolutionStation
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Mechanical Engineers

Spoormaker & Partners Inc Mechanical Engineers

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LOUIS KAROL

architecture interiors



Historically, Cape Town is a city of great significance to the Murray & Roberts Group and with a history that goes back to 1902, the group has been responsible for the construction of by far the greatest number of city blocks in and around the CBD.

Murray & Roberts Western Cape is well positioned through its expertise and localised knowledge to continue to contribute to the Cape Town construction industry.

Its broad range of services is implemented by skilled professionals who have proved their competence time and again. Services are underpinned by attention to detail, passion for each project and a willingness to listen to its customers.



#### **Murray & Roberts Western Cape**



Tel: +27 21 431 3400 www.construction.murrob.com/operations\_wcape.asp



### Brand Engineering Implements Electrical Installations for Portside

Brand Engineering SA (Pty) Ltd was appointed as a sub-contractor to Murray and Roberts Western Cape in February 2012, and was responsible for the electrical installations of the 139m high landmark Portside building – in conjunction with and according to the respective design of the electrical consultants, BFBA Consultants (Pty) Ltd and Claassen Auret Inc.

aving been involved in what was previously the tallest building in Cape Town, Safmarine House, Brand Engineering SA (Pty) Ltd are extremely proud to have played a major role in the successful completion of the challenging Portside project.

Established over 40 years ago, Brand Engineering, together with its two Empowerment Companies, Besamandla (Western Cape) and Besamandla (Eastern Cape), is a leading electrical contractor in Southern Africa and throughout the African continent.

#### Scope of Work

"Our scope of work involved the MV and LV reticulation, lighting and small power installation, as well as all wire-ways for electronic systems," says Michael Brand, Projects Director, Brand Engineering SA (Pty) Ltd. "The installations were particularly challenging due to the height of Portside."

The backbone of the Portside electrical installation was the MV and LV Supply System which was subdivided into two zones: Old Mutual (basement -3 to level 22) and First Rand (between levels 23 to 34).

Portside incorporates a Main Intake substation for both Old Mutual and First Rand. This Main Intake substation not only has an 11kV switchgear, which is fed from the CCC MV substation incorporated in the building at the ground floor level in Machau Street, but also has a full generator back-up system consisting of two 1.25 MVA generators with 400V/11kV Step Up Transformers. These operate in parallel synchronization by supplying the MV switchgear in the event of a CCC Main power failure.

The Old Mutual substation on Level 6 holds an MV switchgear which supplies two 1.25 MV oil type transformers. These in turn supply the Old Mutual Main LV distribution board (DB) and all the Tenant Floors via two 2000A Busbar systems for both the AC and general supplies.

The First Rand MV substation on level 32 comprises two 1.35 MV dry type transformers which supply a multi panel Main LV switchboard, and in turn supplies all the sub-main DBs on the First Rand floors via A & B supplies.

The Main LV DB and the sub-main DBs were installed with programmable power meters connected to a state-of-the-art Building Management System (BMS). The

First Rand Main DB is also unique in that it has eight separate UPS supplies.

"All cable ladders throughout the building had to be installed and coordinated with other services to avoid clashes in the risers and on the floors," Brand explains. "We had to carry out the work according to strict guidelines so that the various cables were not damaged during the pulling."

The DBs also required special care during installation. "Of the 142 DBs, 63 had to be brought onto site with specialist riggers due to the confined space and time frame."

#### In total Brand Engineering installed:

- Old Mutual: 7,000m of cabling from Basement -3 up to level 22.
- First Rand: 13,700m of cabling and 14,000m of earthing cable from the Main DB on level 32 to all DBs on the 10 floors below
- 12,100 LED Luminaires controlled by motion and day-light harvesting sensors
- 282,000m of wiring
- 17,600m of cable ladder
- 149,000m of conduit
- 54,500m of trunking

The different contractors and consultants worked together as a team to meet the 5 Star Green Star specifications.

"Everyone pulled together as a team to reach a common goal. Vital here was effective communication," says Brand.

A total of 180 Brand Engineering employees were allocated full-time to the Portside project.

"The commitment and dedication of our workforce could be noted by the long hours worked to meet the tight deadlines stipulated by the main contractor."

Brand Engineering is completely committed to safety, and as a result was awarded a 5 star safety grading for this project.

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Liviero Building (Pty) Ltd MAIN CONTRACTOR

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#### New Military Health Base Depot for the South African Military Health Service



#### **PROJECT**



NEW MILITARY HEALTH BASE DEPOT FOR THE SA MILITARY HEALTH SERVICE

Thaba Tshwane Pretoria

#### CLIENT

The Department of Public Works: Pretoria Region

#### **USER-CLIENT**

The Department of Defence: South African Military Health Service

#### **ARCHITECT & PRINCIPAL AGENT**

Jeremie Malan Architects in a joint venture with Impendulo Design Architects

#### QUANTITY SURVEYOR

Mokate Monk & Du Plessis

#### CIVIL & WET SERVICES ENGINEERS

Ntsu Engineering Consultants ArchCAD

#### STRUCTURAL ENGINEERS

Civil Concepts Emzansi Consulting Engineers

#### FIRE, ELECTRONIC & MECHANICAL ENGINEERS

Mnjiya Consulting Engineers JP Partnership

#### ELECTRICAL ENGINEER

Ukhozi Consulting Engineers

#### LOGISTICS CONSULTANT

Fortna

#### LANDSCAPE ARCHITECT

Marian Louw Landscape Architect

#### ACOUSTIC CONSULTANT

Jacques Rossouw Acoustic Consultant

#### OCCUPATIONAL HEALTH & SAFETY

SHEM Consulting & Training

#### GREEN STAR RATING CONSULTANT

WSP Green by Design

#### MAIN CONTRACTOR

Liviero Building (Pty) Ltd



SAPOA AWARD OF EXCELLENCE - OVERALL HERITAGE AWARD 2014

## New Military Health Base Depot

#### for the South African Military Health Service

TEXT AND PHOTOGRAPHY COURTESY OF JEREMIE MALAN ARCHITECTS & PETROL PHOTOGRAPHY

he Military Health Base Depot (MHBD) is a formation within the South African Military Health Service (SAMHS) responsible for the acquisition, stockpiling and distribution of medical supplies and pharmaceuticals. SAMHS required a larger, more secure and modern base to ensure optimum functioning of this crucial formation within the Department of Defence.

#### OVERVIEW

An existing military property of 64,571m<sup>2</sup> in Thaba Tshwane was selected as the most suitable site. A number of the existing buildings on site were identified to have significant heritage value and had to be retained in the new design.

Requirements were met through a campus-type development with 12 buildings of different sizes and functions, including 5 heritage buildings being restored and creatively adapted for re-use. The main functions are as follows: pharmaceutical storage, general storage, vehicle storage, specialist storage (weapons, ammunition & medical containers) and offices. All buildings are serviced with the latest technology and managed by a highly advanced electronic Building Management System. The total gross building area of the development amounted to  $\pm$  30,000m².

#### BEFORE



#### **AFTER**



MILITARY HEALTH BASE DEPOT





Of the existing buildings



In keeping with the historic warehouse character and the storage functions of the new buildings, the new design displays an industrial aesthetic



for construction & materials, which relate to cost effective, low maintenance buildings. In a 'turnkey' fashion, the complete Furniture, Fittings & Equipment (FF&E) for all the buildings formed part of the building contract. The gross building cost, including FF&E was R16,260/m² (incl. VAT). The nett cost (i.e. without FF&E) was R13,900/m² (incl. VAT).

These building costs, which include site works, are extremely good value for money for high quality, technologically advanced buildings. The costs per m² of the new buildings can be used as cost norms for similar future developments by DPW.

### DESIGN CONCEPTS

### Heritage buildings

Of the existing buildings on site, two old Bellman type aircraft hangars and one railway type platform building had to be retained and restored as per heritage legislation. They were re-fitted internally to accommodate new functions. The steel structure skeleton of another hangar was retained and re-cladded with steel and translucent roof sheeting to create a covered parade ground.

These historic buildings and the existing road between them form a pedestrian-friendly Heritage Core of the site. Shaded seating areas and water features allow users time to experience the character of the old buildings.

The existing ammunition store received an architecturally designed steel bracing structure and floating roof to prevent further damage to this historic building.

### **Building Massing**

Buildings face north for good solar orientation. Buildings are long in the

direction parallel with the site contours to minimise cut and fill operations.

New buildings in the Heritage Core are of a smaller scale to match the historic building fabric. Larger buildings are placed a respectful distance away from this central area.

The site is intensely populated with structures and services and the area available is used to its maximum potential. The extreme fall on the site further intensified the design solutions which include large scale engineered retaining walls (concrete block and in-situ) to create platforms for the extensive footprint of the warehouse buildings.

### Vehicle & Pedestrian Circulation

Space had to be provided for the turning circles of large trucks that will do collections and deliveries from the warehouses. Entrance gates, road widths





40 MILITARY HEALTH BASE DEPOT



### KEY TO PLAN AND BIRDS EYE VIEW

- A. Military Health Depot
- B. Transport Park
- . Military Health Mobilization Depot
- D. Unit Support Building
- E. Weapons Store
- F. Medical Container Store
- G. Quartermaster Building
- H. Flammable Store
- I. Gatehouse 1
- J. Gatehouse 2
- K. Covered Parking
- Existing & Refurbished Buildings
  - New Buildings

and building spacing across site were adapted so that large trucks can reach all of the buildings.

Pedestrian circulation is centred on the Heritage Core and simplified to prevent minimum overlap with vehicle routes. Where pedestrian routes do cross internal roads, the paved walkway surfaces are laid over the concrete roads to indicate the preference that pedestrians have on site.

### Industrial Aesthetic

In keeping with the historic warehouse character and the storage functions of the new buildings, the new design displays an industrial aesthetic. The existing hangar buildings use steel structures and sheeting extensively. Face-brick walls and cantilever roofs are characteristic of the historic railway type platform building. The design

exploits both of these aesthetics in the new buildings. Red face-brick is used extensively at ground floor level with steel sheeting above. Galvanised steel trusses cantilever from façades at a high level, suspending sun protection louvres and vehicle loading canopies below.

Concrete, facebrick and galvanized steel are hard-wearing materials that provide durable, low maintenance finishes that remain attractive over time

The forms of the new buildings are plain, uncluttered and modern, providing a design solution that is not overly stylistic but timeless. The buildings are crafted to have a strong, yet not overwhelming presence, that mirrors the role that a healthy military fulfils in society.

### EFFICIENCY OF OPERATION

The efficiency and security of the MHBD operations are greatly increased by

the new buildings and equipment. Advanced features of the pharmaceutical warehouse include the following: high level racking (13m) with a bar-coded storage system, an automated conveyor system and an integrated electronic Warehouse Management System (WMS) that coordinates stock management.

Building services e.g. HVAC, intrusion alarms, CCTV & access control, fire detection & irrigation, are all monitored and controlled by a very extensive and advanced electronic Building Management System (BMS). Problems with building services can be identified quickly and accurately for quicker reaction and resolution.

Site security is given the highest priority by means of over 450 CCTV cameras, a three part electrified boundary fence system and biometric access control for staff and visitors.



The new Military Health
Base Depot raises the
standard for multifunctional military bases in
South Africa to a new level.
It puts the latest technology
and best facilities at the
disposal of its users





### **SUSTAINABILITY**

The project addresses the challenges of sustainable design on various levels:

### **Energy Efficiency**

The greening of lighting and HVAC installations was made a priority and energy efficient equipment was specified by the mechanical and electrical engineers. With the increased capital costs of the green equipment taken into account, the HVAC installation projects a saving of R3,5M (net present value) over 20 years. The capital cost payback period is 8 years.

For the lighting installation, the resultant saving is projected at R6,0M (net present value) over 20 years with a capital cost payback period of 6 years. The lighting system is equipped with occupancy and daylight sensors that automatically adjust electric lighting depending on the natural daylight available.

Hot water in the 3 largest buildings is provided by a heat-pump system, which results in further energy savings.

### Passive Design

Special care was taken to provide good insulation to all the buildings, including the warehouse areas. Especially important was insulation to the pharmaceutical warehouse which is airconditioned to maintain a temperature of 22 degrees. Insulation was added to the existing buildings as part of the restoration process.

The buildings are orientated north and the glazing is protected by large overhangs of aluminium filigree. Low emissivity glass was used for windows and shopfronts to regulate heat flow. For areas with limited protective overhangs, a reflective low-E glass was specified.

### Water

Rainwater is harvested from the roof for use in the vehicle washing area. Stormwater surface runoff is directed to lushly planted rain gardens where it can percolate into the soil, reducing the load on the municipal storm-water system.

Sanitary fittings are of water saving and low-flow types. The heat pump has a circulating system that provides instant hot water, thus saving the standing cold water in pipes that would normally be wasted.

### Transport

One of the main reasons for deciding on the site in Thaba Tshwane, in spite of its challenges, is its proximity to the Pretoria inner city and transport nodes e.g. a taxi rank, Pretoria Central Railway Station and the Gautrain.

A portion of conveniently located covered parking is reserved for motor-cycles and bicycles and there are shower facilities for cyclists.

### Indoor Environment Quality

The majority of spaces are supplied with air-conditioned, filtered, fresh air. In the case of HVAC failure or maintenance, there is the option of natural ventilation through openable windows.

Materials with low Formaldehyde and VOC (Volatile Organic Compounds) emissions were specified, e.g. paint and insulation products. Existing hazardous materials on site (e.g. asbestos) were removed with the required safety measures in place.

### Materials

Face-brick and concrete were used extensively for their strength, low maintenance and good thermal properties. Hot dipped galvanised steel is used as a no-maintenance, hard wearing material for exposed structural elements.

A saving on materials was achieved, firstly by re-using existing structures and secondly, by re-erecting five dismantled steel hangar structures (1,200m² each) elsewhere. Furthermore, paving bricks from the old site were re-used in the new design and demolition rubble (i.e.





concrete & bricks) was crushed for use as fill material.

### **Empowerment & Job Creation**

During construction, the main contractor employed  $\pm 750$  workers and subcontractors employed another  $\pm 750$  over a period of two and a half years. The consultant team employed  $\pm 100$  highly qualified staff over a six year period. The average BEE level for the consultants and contractor is Level 2.

Local developing artists were used to produce artworks & sculptures as part of the project. The artworks were specifically chosen and commissioned to portray the role of the Military Health Service. A photographer was commissioned to capture SAMHS personnel and equipment in action and these are displayed as large scale artistic prints in the buildings to further create a sense of place.

### Workmanship

Meticulous care was given to the detailing and construction of each building element. Two architectural clerk of works, a structural resident engineer and an electric resident engineer monitored construction quality throughout the project. Quality of work was addressed with each sub-contractor and the main contractor on a continual basis to ensure finishes with good longevity in a challenging environment.

### Management

The extensive BMS allows for the accurate monitoring and reporting of electricity use, water consumption and the efficiency of HVAC installations. Any deviations in the design performance can be identified and addressed promptly.

The building contract included a 12 month maintenance contract for all equipment and installations. This gives the DPW and SAMHS opportunity to witness the maintenance and



servicing of installations before taking over responsibility.

### SUMMARY

The new MHBD raises the standard for multi-functional military bases in South Africa to a new level. It puts the latest technology and best facilities at the disposal of its users. Not only is the technical efficiency of the SAMHS boosted, but the military personnel are also given a pleasant, architecturally stimulating work environment that encourages best performance.

Inspection visits by DPW and military delegations showed a favourable response to the project. The complex has generated a new excitement about the possibilities of re-use and campus design for government departments.

### ADVERTISERS ON THIS PROJECT:

Jeremie Malan Architects + Interiors Architects

Impendulo Design Architects Architects

Civil Concepts
Structural Engineers

Emzansi Consulting Engineers Structural Steel Engineers

JP Partnership Mechanical Engineers

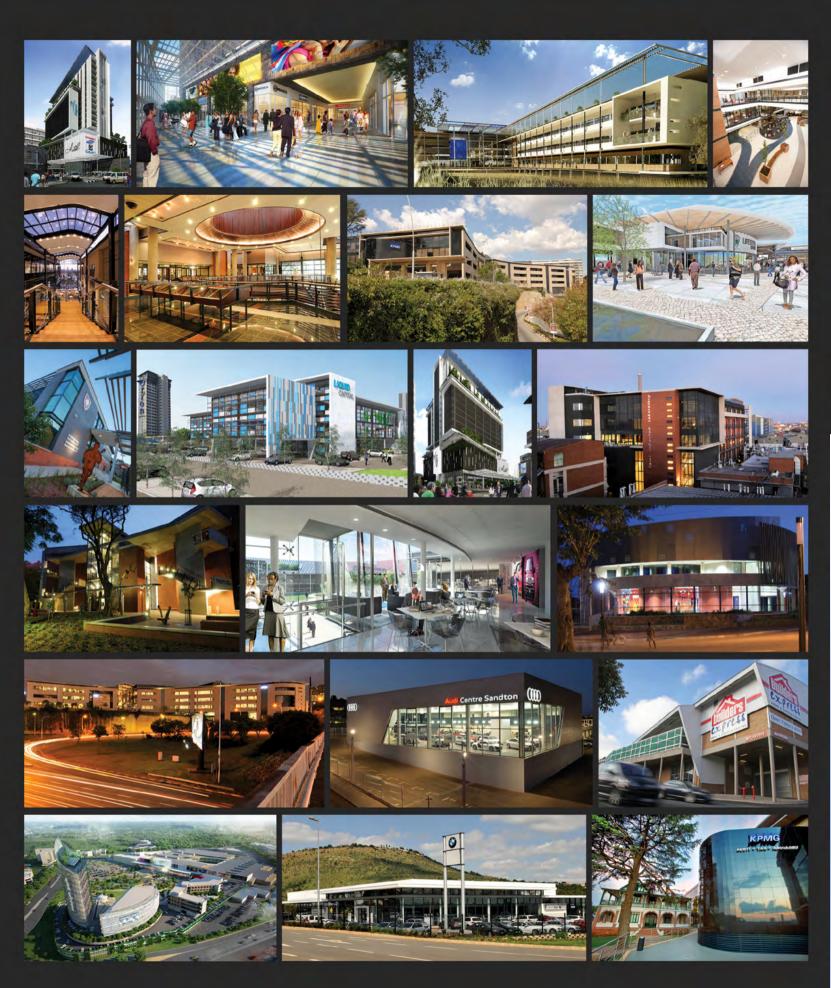
**Liviero Building (Pty) Ltd**Main Contractor

Mnjiya Consulting Engineers Fire, Electronic & Mechanical Engineers

Mokate Monk & Du Plessis Quantity Surveyors

**Ukhozi Consulting Engineers** Electrical Engineers

MILITARY HEALTH BASE DEPOT 43



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### **PROJECT**



# Jindal Mining

The new head office is designed to cater for future expansion of the Jindal Africa group and provides a total floor area of around 4,300m<sup>2</sup>

PHOTOGRAPHS BY GARETH GILMOUR PHOTOGRAPHY AND JINDAL AFRICA

### JINDAL MINING

Bryanston, Johannesburg

### CLIENT

Jindal Africa

### PROJECT MANAGERS

**NB Property Solutions** 

### **ARCHITECTS & INTERIOR ARCHITECTS**

**KMH Architects** 

### **QUANTITY SURVEYORS**

**BWR Quantity Surveyors** 

### **CIVIL & STRUCTURAL ENGINEERS**

L & S Consulting
Quad Africa Consulting

### **MECHANICAL ENGINEERS**

WSP in Africa Graeme Page Consulting Engineers

### LANDSCAPE ARCHITECTS

The Gardeners

### MAIN CONTRACTOR

Probest Projects

indal Africa is a part of Indian multinational conglomerate Jindal Steel and Power Limited (JSPL), which in turn is part of the US\$18 billion, diversified O.P. Jindal Group. This industrial conglomerate is a leading player globally in the steel, power, mining, coal to liquid, oil & gas, and infrastructure sectors. Jindal recognises that Africa is endowed with great mineral wealth and hardworking committed people. As part of their foothold and expansion in Africa, Jindal Africa decided that a bespoke head office was required in Johannesburg, to replace their rental offices which had served their needs since around 2008.

Principle Agent & Project Manager, Nicky Butler of NB Property Solutions, was commissioned to assist with a rigorous selection process for the architects and design of the new head office. A limited competition was launched, first to establish competencies, and then to submit design approaches for a short-listed group of practices. KMH Architects was selected as the architect for the project following this process, which also involved Mr. Naveen Jindal himself, the Chairman, as the final adjudicator.

A key element of the design brief was that the project should be designed around Vastu Shastra principles. Vastu Shastra is an ancient system of design and construction based on natural law\*. It is quite specific in the organization and hierarchy of space and function, the orientation of a building and how it is sited on the land. An expert professor from India was consulted to review the initial concept design and to comment on the





\*VASTU SHASTRA which literally translated means the 'Science of Buildings' is an ancient Indian 'Architectural Science' that deals with inter-related subjects like Geography, Geology, Geometry, Astrology, Philosophy, factors influencing a site such as Topography, Orientation, Surrounding structures, Roads, Sun, Earth's magnetic field etc. and lays down guidelines for the design and construction of a Building or 'Vastu'

interpretation of Vastu Shastra principles for the southern hemisphere, which has scant precedent and history as opposed to the northern hemisphere.

The new head office is designed to cater for future expansion of the Jindal Africa group and provides a total floor area of around 4,300m². The dominant use of steel elements in the building was encouraged to reflect the industry in which Jindal is present. The site is the consolidation of two erven on prominent William Nicol Drive in Bryanston. Access to the building is via Kildoon Road, which also serves the adjacent motor dealership on the corner. There is a 12m fall from the NW corner of the site to the SE corner. This is in line with Vastu Shastra principles for the southern hemisphere, which means the site is naturally aligned to these conditions.

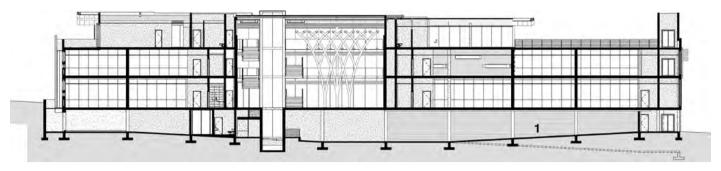
The building conforms to zoning guidelines, consisting of 3 storeys of office and accommodation space, with one semibasement level of parking. Green design has been incorporated into the building wherever appropriate and best practice has been implemented in each service to the building.

### Project Concept

KMH Architects' winning concept design entry for the competition remained remarkably true to the end product achieved. Hats are tipped to the Client for sticking to the original concept without diluting aspects during design development and detail design stages.

The design concept proposal uses the metaphor of rock/stone strata, shifting techtonic plates and the process of mining





LONGITUDINAL SECTION

as a narrative in the way that planes and spaces are pulled, shifted and expressed to create a building whose identity is based on the story specifically tailored around Jindal Mining, as well as adhering to best practice in sustainable design and Vastu Shastra principals.

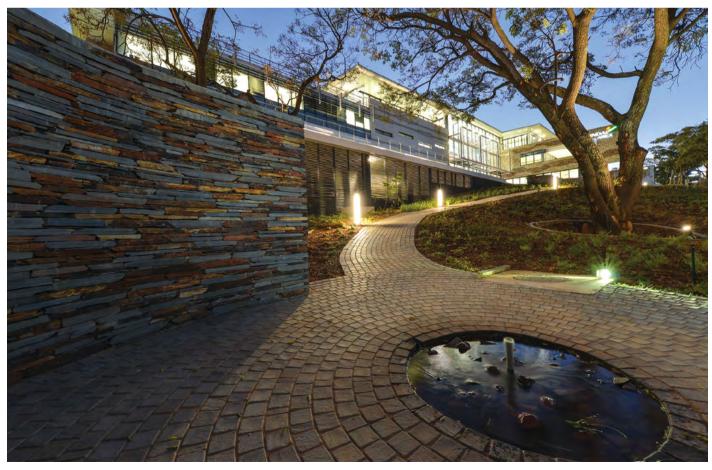
Two large scale stone walls form the sides to the central foyer and entrance area. A dramatic steel lattice structure, integrated with the bridge link between the two office wings, with a fully glazed lift and shaft and sculptural steel staircase, greets you upon entering the building.

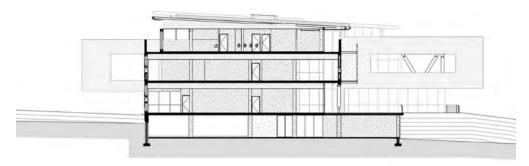
The triple volume main entrance of the building is flanked by two office wings. L&S Consulting played an important role in resolving the structural details and elements of these features.

The building envelope responds to the orientation of the building and to the function inside the building. The main entrance is on the west side of the building and is largely solid, except for the triple volume entrance that is glazed with sunscreens.

The other dominant façade is to the east facing William Nicol Drive and is mostly glazed, affording fantastic views across the Johannesburg skyline and Sandton. The palette of finishes and materials is distinct and limited to expressed steel V-columns.

The roofs are resolved in accordance with Vastu Shastra so that the highest portion is to the NW and the lowest portion to the SE. The sheet metal roofs, with steel clad eaves cascade down in this order, giving the building elegance in proportion which mimics the fall to the site itself.





The concept proposal uses the metaphor of rock/stone strata, shifting techtonic plates and the process of mining as a narrative

**CROSS SECTION** 

The landscaping to the site is an important part of the overall concept with a prominent water feature and a smaller feature at the SE corner which also follows Vastu Shastra guidelines. As many trees as possible were retained on site and numerous new trees have been planted by Landscape Architects, The Gardener. Sweeping lines of plants form an organic backdrop to the angular shape of the building.

### Interior Architecture Design and Services

KMH Architects was also appointed as the interior architects for the project. Interactive briefing processes with the Client provided detail information on the scope for spatial and services requirements.

The ground floor is largely dedicated to meeting rooms and more public spaces. The

first floor is purely office space and the second floor is allocated to a canteen and function area with a large rooftop terrace, and an office and accommodation suite for Mr. Jindal and executives.

The overall concept is contemporary and elegant. Colours are either neutral or accented in a corporate Jindal colour. New desks and furniture were procured specially for the new building. Bespoke joinery fittings were designed to accommodate specific functions and Client requirements throughout.

Art was commissioned specially for identified spaces, including beautiful lighting by Astrid Dahl, paintings by Jenny Parsons, and pieces by Margot Hatting and Tineke Mayer. A custom woven rug that echoes the colours and forms of the earth was commissioned from Husky Design.



The overall concept is contemporary and elegant. Colours are either neutral or accented in a corporate Jindal colour





### Execution

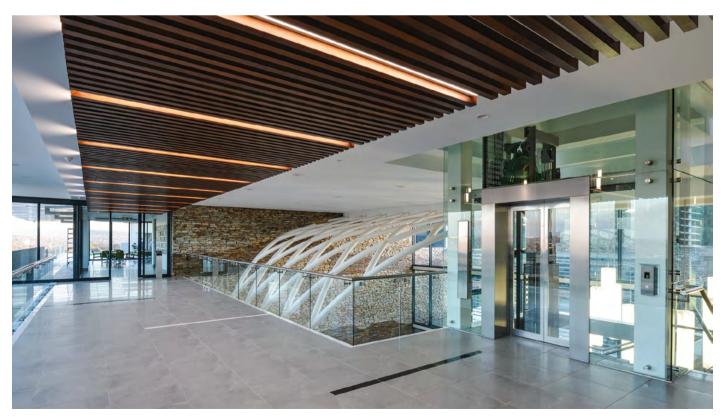
The project construction, including the interior fitout, took 12 months following the clearing and levelling of the site. Probest was awarded the contract after a unique ratestender and negotiation process.

Detailed planning took place for the security, data and audio-visual interface.

### **HVAC**

The air-conditioning solution of this building was designed by WSP in association with

Graeme Page Consulting Engineers to comply with the latest SANS 10400 criteria and energy efficiency was high on the agenda. A VRF system with full heat recovery functionality serves the majority of the occupied areas providing individual indoor environmental control for each boardroom and meeting room and in the case of the offices on a zonal basis for the internal and perimeter areas. Hot water for the building was also achieved through the waste heat of the VRV system and heat exchanger.









The building is a culmination of dedication and commitment by a team of highly experienced professionals and main contractor and his subcontractors

With a VRF air conditioning system, some indoor units can run in a cooling cycle while other indoor units are running in a heating cycle. Mitsubishi's VRF air conditioning systems have the lowest start up and running amps that in turn provide for a lower running cost. Their heat recovery system makes use of refrigerant control boxes that reclaim the heat removed from the spaces and divert the hot gas to other spaces that require heating.

Another advantage of the VRF airconditioning system is the ability to integrate with the building's domestic hot water systems. Mitsubishi offers technology whereby the VRF system is able to supply heating via what is known as a 'booster unit'. The 'booster unit', comprises an inverter driven compressor and a plate heat exchanger. The booster unit is coupled to the domestic geyser by using a simple water circulating loop and plate heat exchanger. The energy made available by the VRF system is then able to heat the building's daily domestic hot water demand, without using electrical elements. This solution





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**NB Property Solutions** Project Managers

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**Quad Africa Consulting** Electrical Engineers

**The Gardeners**Landscape Designers

**WSP in Africa**Multi-Disciplinary Engineers

ensured that the most sustainable system was selected in terms of both energy consumption and initial capital costs.

### Summary

Jindal Africa has a firm footing in Africa in its realisation of its new head office in Johannesburg. Mr. Naveen Jindal said at the inauguration of the building, 'The completion of this state-of-the-art building will enable us to execute even better on our strategy to deliver a renewed strength towards collaboration

with all stakeholders as well as further develop our brand within the African continent.'

The building is a culmination of dedication and commitment by a team of highly experienced professionals and main contractor and his subcontractors – all hand picked to produce the best quality possible. Under the overall project leadership of the client representative, Debratna Nag, and the Jindal Africa CEO, Mr. Ashish Kumar, the overall vision was achieved as originally set out by Mr. Jindal himself.



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### TOP BILLING DREAM HOME

The Mirage, De Waterkant, Cape Town





### **PROJECT**



# Top Billing Dream Home

The design of the duplex apartment expresses a distinctly modern African attitude that is current with today's demands of fast paced city living.

TEXT BY AA INTERIORS PHOTOGRAPHY BY ADAM LETCH

### TOP BILLING DREAM HOME

The Mirage, De Waterkant, Cape Town

CLIENT

Top Billing

PROJECT MANAGER

AJC Architects

INTERIOR ARCHITECTS

AA Interiors

INTERIOR DÉCOR

OKHA Interiors

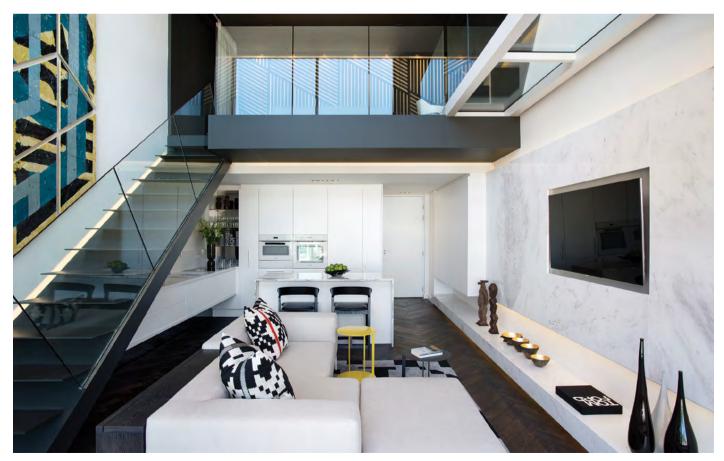
A Interiors is the Interior Design and Décor division of the architectural firm, SAOTA. Led by Mark Rielly and Adam Court, AA Interiors has become known for creating some of the most exclusive interiors in South Africa as well as international locations including Paris, Moscow, London, New York, Dubai and Geneva.

This dynamic and innovative practice conceptualises and creates contemporary interior spaces and bespoke décor for the full spectrum of interior design briefs which includes domestic, hospitality, retail, corporate and leisure sectors. Their interiors meet the international standard of being modern, luxurious and seductive while at the same time remaining understated and timeless and in tune with the delights of quality living demanded by their discerning clients.

### PROJECT DESCRIPTION

Brief

The brief was to transform a duplex apartment shell in the new Mirage development being constructed in De Waterkant. This trendy suburb is located in the heart of Cape







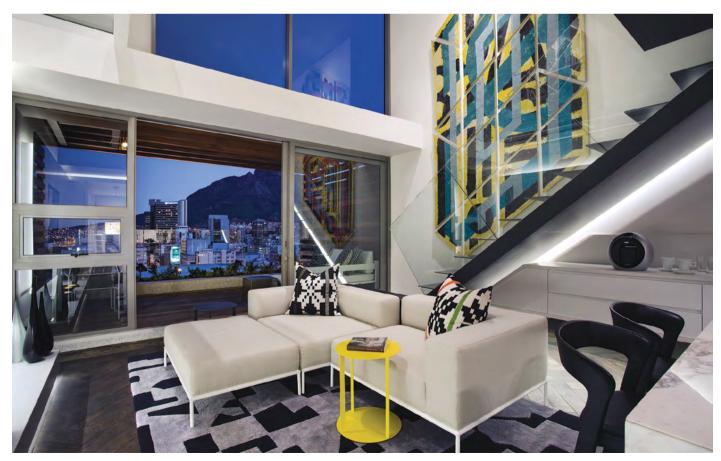
The design of the duplex apartment expresses a distinctly modern African attitude that is current with today's demands of fast paced city living

Town and, in the day, hosts cool-hunting hipsters frequenting impossibly quaint eateries and in the evening it becomes the urbanites playground as fashion and art champion the nights. The brief to the design team was to create a sanctuary for these city slickers and to create a space that captures the 'urban chic,' combining contemporary living with high design.

### Design

The design of the duplex apartment expresses a distinctly modern African attitude that is current with today's demands of fast paced city living. The apartment is a space of calm and serenity for re-energising, relaxing within, floating above the city streets of its location. Using these criteria as the foundation of the design direction, the interior is a stylised and dynamic clutter-free space that is a forward thinking, contemporary luxury urban space that maximises spatial use, cutting edge design and technology.

The spatial constrictions of the space have influenced the design and careful consideration to ergonomic planning, have influenced the design process. The requirements of the modern urban couple, that desire to live a streamlined, fluid and finely focused existence and the need to express



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one's individuality have been at the forefront in the conceptualisation of the apartment.

The design takes advantage of the small space to highlight clever functionality and, wherever possible, spaces double-up in function.

### Challenges

The largest challenge was that the designers had a small narrow space with high double volume walls to work with as well as an extensive brief requiring the inclusion of a number of living elements.

The total internal floor area of the existing shell was only 65m<sup>2</sup>. To define the bare spaces, Mark Rielly and Michele Rhoda conceptualised a black and white colour pallet as the base fabrics for the walls, floors and ceilings.

### Concept

The concept was to create a light living space with a dark bedroom cubicle cantilevered overhead. This theme of day and night was introduced to reflect the way in which the apartment functions differently at various times of the day. To break up the 'box space', angular and facetted elements were introduced in the stair and ceilings to create drama and interest. The large, double volume vertical walls were broken up by the feature black stair on the one side and, on the opposite wall, a cantilevered white glass bridge. The glass bridge extension adds additional floor area to the apartment and functions as a library platform. To keep the apartment spacious, and to accentuate additional floor space, a number of the design elements such as the joinery, kitchen counters and the TV





wall ledge, float. Concealed lighting has been added to these elements for more dramatic lighting effects.

The lower living level features a seamless spatial flow between the kitchen and living room on to the terrace with uninterrupted views of Cape Town's cityscape and Table Mountain. The feature black steel staircase slices through the apartment and creates a strong focal point, linking to the private bedroom suite upstairs. The kitchen design incorporates a Careline kitchen finished in white duco which has been matched with white Miele appliances. By cleverly tucking the kitchen underneath the staircase and having the centre kitchen island double up as a bar and a dining table, the multi-functional lower level can be used both practically and for entertainment.

The brief also required that the design team create a master dressing room. Due to the size of the apartment, the designers combined the master dressing room and en-suite bathroom into one and created a dark, 'moody' sanctuary for bathing and dressing.

There is a strong emphasis on rhythm, geometric forms and graphic elements that are reflective of modern patterns. The general colour pallet is kept crisp and monochromatic for a clean and uncluttered look and feel. This is warmed up with a beautiful dark wood parquet flooring and, again, the warm timber is picked up in the angular graphic timber screen used behind the bedroom wall to separate the dressing room en-suite. The parquet flooring, concealed LED lighting and décor items, bring the added dimension of warmth into the space.

### Avant Garde Design

The design team wanted the interiors and artwork to explore the avant gardist graphic of the interior architecture and to introduce colour. Adam Court played with a fusion of modern African graphics and colour to juxtapose the lean, monochromatic interior. Artist, Daniel Orme, was commissioned for the one major artwork hung above the staircase.

Some of the furniture has multiple uses, i.e. tables that also provide storage, the bookshelves that act as an installation artwork, plus all the furniture was custom-designed to fit in the available space, allowing enough circulation. The furniture is modular, allowing the layout to be re-configured as need be. As the interior needed to be a place of calm and serenity, 'less is more' was the design rule but still allowing for personal expression and individuality to have its place.

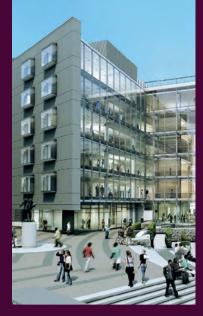
Renowned for its contemporary take on African luxury, AA Interiors' distinctive style paired with the unique pieces designed by OKHA Interiors, sets this apartment in a category of its own.











NO. 1 SILO AT
THE V&A WATERFRONT

Overall winner, winner of the corporate office development category and recipient of the overall green award (second year running)



NO. 2 SILO AT THE V&A WATERFRONT

Winner of the residential developments group award



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# 2014 SAPOA AWARDS

NO 1 SILO

Corporate Office Development Winner Overall Green Award Winner Overall Winner



NO 2 SILO Residential Development Winner











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# 2014 SAPOA AWARDS

ALICE LANE PHASE ONE Commercial Office Development Winner





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# 2014 SAPOA Innovative Excellence in Property Development Awards



Professional property owners in South Africa recently announced the winners of the prestigious South African Property Owners Association (SAPOA) Innovative Excellence in Property Development Awards 2014. Winners were announced in 10 categories.

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# OVERALL WINNER OVERALL GREEN AWARD WINNER CORPORATE OFFICE DEVELOPMENT WINNER

No 1 Silo

he development of the new No.1 Silo office building at the V & A Waterfront began with the intention of setting the new benchmark in South Africa for contemporary office design. With its striking design and the award of a 6 star Green Star SA rating for design by the Green Building Council of South Africa, the Developer, V & A Waterfront, believes that it has achieved this. The No. 1 Silo office development was South Africa's second 6 Star green office building and the first in the Western Cape.

In a first-ever achievement for a South African building, No. 1 Silo has been awarded a 6 Star 'As Built' rating by the GBCSA for its impressive and environmentally-friendly construction.

### Design

The internal arrangement of the 1 Silo building consists of two parts, a west wing and east wing, with a central void containing circulation elements and access to the atriums. The central void recalls the alignment of the previous grain conveyor belt to the Collier Jetty, thus providing visual continuity from the public square to the Jetty. By keeping the cores on the outer edge of the wings and the circulation / fire escape routes to the perimeter of the floor plates, an egalitarian approach is enabled as it ensures that no matter where you sit on the floor plate, you are entitled to a view.

Challenges in creating a fully glazed façade were enormous as the climatic influence created all sorts if issues with the working environment. The resultant façade of the completed building is a ventilated double skin glass system with mechanically controlled blinds on day light sensors, thereby creating an energy efficient interior. Strategic internal lighting transforms the new building at dusk. The living roof 'Green Roof', with its beautiful views of the harbour, acts as a social space for the office, while increasing biodiversity and helping to reduce the urban heat island effect created by traditional roof construction.

### Conclusion

The building seeks to find a balance between the requirements of a contemporary office building and the historic industrial building typologies of the V & A Waterfront. The aim and intention was to develop the building's conceptual underpinnings and façade resolution to reflect the inherent integrity of these buildings that were mostly efficient, direct and honest in the manner in which they responded to their often pragmatic briefs.

The building is sustainable and well beyond the requirements of 'best practice'. The client's commitment to the environment ensured that sustainability sat at the heart of the design process.







**Developer:** V & A Waterfront Holdings

Client: Allan Gray
Architects:

Rick Brown & Associates; Van der Merwe Miszewski Architects in association Project Managers and Principal Agent:

Mace International Management Services

Quantity Surveyor: MLC Interior Architect: Collaboration

Structural & Civil: Sutherland Engineers Electrical: SolutionStation

Mechanical, Wet Services & Sustanability Consultants: Arup

Transport:

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Fire Consultant:

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Acoustic Consultant: SRL South Africa Geotechnical Consultant: Roger Hendry

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Urban Designer: City Think Space Heritage Consultant: Nicolas Baumann Heritage Management Consultant Landscape Architects: Planning Partners

Land Surveyors:

David Hellig & Abrahamse; FBV

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Disability Consultant: Disability Solutions

Main Contractor: WBHO
Photography: Mark Hoberman







### **COMMERCIAL OFFICE DEVELOPMENT WINNER**

Alice Lane Phase One

Abland, together with Standard Bank and Pivotal Property Investment Fund, opened the doors to Phase One of the triple A grade offices in August 2013. Triple A grade is reserved for only the most prestigious buildings with high quality finishes and state of the art systems.

This building was designed to form an important piece of an urban puzzle. The building is one of three office blocks that sit on a landscaped piazza. The intention behind the piazza is to create an open public space that links the offices to each other and to the surrounding streets and buildings, providing office tenants and the public with a pleasant environment.

The building was designed to frame views from the piazza of the surrounding vistas and to terminate views on the piazza. It allows a transparent view through the building's arched underbelly whilst framing the gardens and defining the public space's relationship with the sky and the views.

The east façade 'leaping-horse' structure with its corresponding west façade balcony openings are innovative elements which clearly define the lines of this building. This leaping-horse is essentially a bridge structure that spans 25m at third floor level, with three levels of offices above. This sculptural

bridge was designed to form part of the opening to the views of Bryanston and to allow the piazza to flow through the ground level of the building.

### **Green Aspects**

The building boasts green features such as energy efficient lighting and air-conditioning systems, and is designed in such a way that a maximum amount of natural light is let into the building. The project included elements such as double glazing and performance glass, careful monitoring of R- and U-values of materials, recycling of water, green parking bays and passive heating and cooling systems.

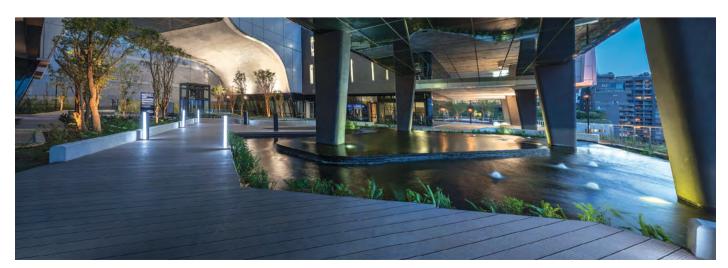
Developer: Abland

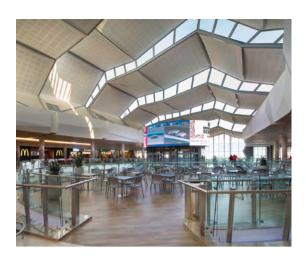
Architects: Paragon Architects

Quantity Surveyors: Quanticost

Civil and Structural Engineers: L&S Consulting Mechanical Engineers: C3 Consulting Engineers Electrical Engineers: Taemane Consulting Façade Consultant: Andrew Riley & Associates

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### **RETAIL DEVELOPMENT WINNER**

**Cradlestone Mall** 

Cradlestone Mall is located west of Johannesburg. It enjoys a unique location near the world-renowned heritage site, the Cradle of Humankind. Designed by Bentel Associates International, Cradlestone Mall offers shoppers a wide range of retail, restaurant and leisure variety under one roof.

The location was the starting point for the underlying philosophy that underpins the design concept.

### Design

The identity of the shopping centre is derived from the evolutionary finds in the area and is subtly incorporated in the contemporary design elements that make up the façade, floors and roof-scapes of the visual portion of the design. The geological column has been used to generate an architectural motif and is a source of colour, finish and texture. Architectural elements such as entrances and courts were given priority in expressing this concept. The stratum of the primordial layering is mimicked in the floors, ceilings and façade elements. Promptly dubbed the 'armadillo', the central feature of the external façade - and covering the internal food court and entertainment zones - is the strata and layer

shaped central roof-scape. Porous, both visually and physically from the external parking deck, this area spills out onto a public square and garden area. The landscaping here harks back to the primordial forest whilst the rest around the centre is more in keeping with the current Highveld landscape.

**Developers:** Sasol Pension Fund; Pivotal Property Fund; Retail Africa

Architects: Bentel Associates International Project Co-ordinator: Sedgeley Developments

Quantity Surveyors: SVR SA

Civil Engineers: ILIFA Africa Engineers
Structural Engineers: Sutherland

**Electrical Engineers:** ESE Consulting Engineers

Mechanical Engineers: Wingrove

Wet Services: Watsol Design Technology
Fire Consultants: Specialised Fire Technology
Traffic Consultant: Techworld Consulting Engineers

Landscape Architects: JJ Coetsee

Town Planner: Insite Landscape Architects

Green Consultants: LEAP

Health & Safety: Cairnmead Industrial Consultants

Main Contractor: Aveng Grinaker-LTA





### INDUSTRIAL DEVELOPMENT WINNER

**Grundfos South Africa** 

Developed by Growthpoint Properties, Grundfos' new headquarters are located on one of the most prominent sites in Germiston/ Ekurhuleni, at the junction of the N1 and R24 highways, which provides excellent street exposure. With the site on a freeway intersection, exposed to the main route to the OR Tambo International Airport, it was imperative that an iconic architectural statement, reflecting the Grundfos worldwide ethos, was reflected.

### Design

Grundfos was intimately involved in the design and aesthetic that they wished to portray. The site incorporates both the new head office (3,000m²) and a warehouse (6,500m²). From the start, it was envisioned that the head office should be green and that a 4- star Green Star rating would be targeted. With this in mind, every decision was made in consideration of the environment.

Designed by Empowered Spaces, the office block is conceptually constructed from two interconnecting blocks around a central, full height atrium, and consists of two office levels over a ventilated basement level. Using insulated concrete roofs, brick walls and a large span of glazing, the design had to stay true to Grundfos' unique global architectural language, but also incorporate a South African impression. Linking this high-end office development to a functional industrial space was a big challenge to ensure both an aesthetic and functional integration.

There are a number of unique features, the most distinctive of which are the two white boxes that intersect to form the main entrance with the glass

façades cut from it. The main entrance is another statement space, although fairly challenging in that the natural ground level was 2,5m lower than the ground- floor entrance. It was decided to have access from all directions and to break up the entry into various levels to make the height difference less noticeable for the visitor approaching the entrance.

The prominent orange façade is created from the vertical shading louvres made up of Grundfos' solar panels and mesh. The mesh was created to allow enough shading onto the glass, yet keep good views to the outside. The louvres also harness the west sun by means of solar panels, which generate the electricity to run the filtration system for the building. Aaesthetically, this is the architects' favourite feature, and it's also the view that one gets from the freeway. The water feature also stands out and is a reference to Grundfos, the biggest pump supplier in the world. It is made up of slabs sliding past each other, penetrating out of the ground - a subtle reference to geological dynamics with water pumped through.

**Developer:** Growthpoint Properties **Architects:** Empowered Spaces

**Project Managers:** Growthpoint Properties

Quantity Surveyors: AECOM

Civil and Structural Engineers: Aurecon

Mechanical Engineers: Aurecon

**Electrical Engineers:** Conscius Consultants **Fire Consultants:** Specialised Fire Technology

Green Consultants: Aurecon Main Contractor: WBHO



### OTHER DEVELOPMENT WINNER

**UCT New Engineering Building** 

The New Engineering Building site is located on the historic Upper Campus of the University of Cape Town. The site has views towards Devil's Peak and McClear's Beacon towards the west and over the Campus and City below towards the east. The building consists primarily of academic offices and laboratories as well as formal and social learning spaces.

### Design

Designed by SAOTA, the architectural palette is strongly influenced by the Upper Campus vocabulary and proportions. The traditional elements are reinterpreted and expressed in a contemporary way. Responding to the rock structures and tectonic movement that formed Table Mountain, the walls are expressed as heavy plates that delaminate towards the south, opening the internal spaces towards the mountain views. The prevalent UCT hipped, tiled roof is deconstructed and expressed as planes that float delicately over the heavier, rendered walls.

### Atrium

Departments are arranged around a southern-lit Atrium and a deliberate east-west break in the building, which allows views to the prominent mountain peaks. The laboratories are situated on the western edge of the building, whilst the southern and eastern edges are predominantly used as office space. Social spaces and informal learning spaces create opportunities for the departments to share ideas and also promote student/lecturer interaction. The entrance and adjacent courtyard are activated

by the Café / social learning space on the entrance level that opens up to a semi-public courtyard.

Pedestrian linkages into the precinct are promoted by cascading steps along the South Edge that opens to smaller landscaped social terraces where students can relax or study between lectures. A new pathway along the western edge allows easy access to transport.

### Sustainability

Shading devices, high performance glass and insulated cavities limit solar heat gain in the extensive east and west facades. The roof lights distribute light and naturally ventilate the Atrium. In the summer months, cool air is circulated into the Atrium from the shaded, landscaped south courtyard, where captured rainwater is used to cool the rock bed and promote evaporative cooling. The building is aiming to achieve a 4-Star Green rating.

### Developer:

University of Cape Town Property and Services

Architects: SAOTA

Project Managers: LMC Project Management

Quantity Surveyors: LDM Civil & Structural Engineers: Sutherland Engineers

Electrical & Mechanical Engineers: SolutionStation

Fire Consultants:

Keith Fletcher & Associates Green Consultants: AGAMA Energy Main Contractor: Filcon Projects





### INTERNATIONAL DEVELOPMENT AWARD WINNER

The Oberoi Centre

The Business Bay district in Dubai represents the emerging technological business area of a growing urban environment. The Oberoi Centre embraces this.

Located at the entrance of Business Bay, the commercial and hotel towers reflect a contemporary environment that co-habits the same neighbourhood as the world's tallest building, The Burj Khalifa and surrounding prestigious developments. Of utmost importance was location, ease of movement and technological infrastructure in a harsh environment. As such it has become a popular destination of choice for growing local and international corporate entities.

The luxury business 5-Star hotel embodies the modern face of the New Dubai and its urban precincts. It is one of the first hotels in Dubai to be awarded an 'A' grade by the Dubai Municipality within the first six months of opening.

### Design

Designed by DSA Architects International, The Oberoi Dubai is a contemporary twin tower design consisting of a G+27 storey, 252 Key, luxurious 5 Star Business Hotel, inclusive of all associated amenities and a G+33 storey Commercial Office Tower on a 4 Level common Podium from Ground Floor to Level 3 with 4 Basement Levels accommodating parking and MEP services.

From the outset, the project was to be delivered to the highest level of design, detail and finish. The proportions of each space and its contribution to the overall massing was carefully considered in order to maintain a human scale.

The building was executed in accordance with LEED accreditation. All products & construction materials were scrutinized to ensure they were of sustainable source and/or excluded consumption or emission of environmentally damaging material.

The hotel design was developed in close collaboration with the hotel operator to ensure maximum efficiency in line with the specific hotel requirements. Each aspect of service delivery was considered to provide guests the best experience possible.

The office building is designed to be subdivided into 3 areas. In all aspects, design & construction were conducted in such a manner as to maintain the highest levels of excellence. The end result is a tailor made hotel, featuring contemporary styled exteriors taking inspiration from the progressive growth of a fast developing financial and commercial hub of Dubai

The juxtaposition of the modern chic interiors with the Eastern inspiration of the Oberoi Group resulted in a smooth transition between the two. The emphasis always being on quality, which is what a world class operator like the Oberoi Group strives for.

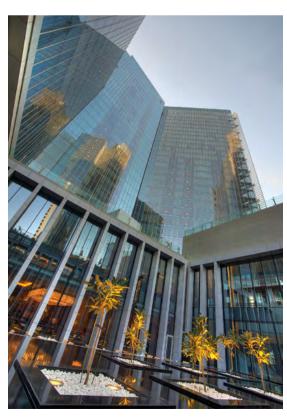
Developer: Rani International Development Co Architects: DSA Architects International Project Managers: Confluence (CPM) Quantity Surveyors: Currie & Brown

Civil, Structural, Mechanical & Electrical Engineers:

Halcrow Yolles, Shankland Cox Fire Consultants: Halcrow Yolles

Main Contractor: Al Naboodah Contractin LLC





#### RESIDENTIAL DEVELOPMENT WINNER

No 2 Silo

From inception, the intention with No. 2 Silo was to include all of the best materials and technology required for it to become one of the first residential buildings in Cape Town to garner a GBCSA rating. (Green Building Council of South Africa)

Set on the water's edge in the historical Grain Silo Heritage site, No. 2 Silo offers picturesque views over the harbour, sea, city and mountains. No. 2 Silo includes 31 luxurious one and two-bedroom apartments ranging in size from 70m² to 157m². Designed by Rick Brown Architects and VDMMA, No. 2 Silo is marked by minimalist architecture, 3m high ceilings emphasising the spaciousness of each open plan apartment, and floor-to-ceiling sliding glass doors adding a light and airy element while seamlessly extending the indoor living areas outdoors. Stylish en-suite bathrooms, large entertainment areas and wrap-around balconies are all in keeping with the latest design trends.

The architects took this unique setting as a starting-point and masterfully pushed the design envelope to optimise the site, its sights and surrounds – resulting in a truly modern classic. Environmental innovations also feature and each apartment boasts external solar shading, sea water cooling, a centralised solar heated hot water system, high performance thermal and acoustic

**Developer:** V & A Waterfront Holdings **Architects:** Rick Brown & Associates and

Van der Merwe Miszewski Architects in association

Project Managers and Principal Agent: Mace International Management Services

Quantity Surveyor: MLC Interior Architect: Collaboration Structural & Civil: Sutherland Engineers

Electrical: SolutionStation

Mechanical, Façade, Environmental & ICT: Arup Transport: Gibb Engineering & Architecture Fire Consultant: Keith Fletcher & Associates



insulated glass, low energy lighting, water-efficient showers and toilets, energy and water-efficient kitchen appliances and even a website allowing homeowners to track and manage their water and energy consumption. To make the most of the magnificent views, the rooftop has been converted into a communal leisure area complete with a 10m x 3.5m ozonated swimming pool, a landscaped water-wise garden, and gas braai facilities.

Green Star Consultant: Arup

Acoustic Consultant: SRL South Africa Geotechnical Consultant: Roger Hendry Town Planner: Neil Schwartz Town Planning

**Urban Designer:** City Think Space

Heritage Consultant:

Nicolas Baumann Heritage Management Consultant

Landscape Architects: Planning Partners
Land Surveyors: David Hellig & Abrahamse; FBV
ECO and Health and Safety Consultant: Eco Safety

Disability Consultant: Disability Solutions

Main Contractor: WBHO

### **REFURBISHMENT WINNER & INNOVATIVE MERIT AWARD WINNER**

University of Pretoria: Mining Industry Study Centre

As part of the University of Pretoria's strategy to address the shortage of engineering skills in South Africa and accommodate the subsequent number of students needing access to facilites, a Study Centre was built for the School of Engineering. This building provides facilities to support learning, especially group work.

Designed by ARC Architects, the new structure was planned and designed to utilise a previously underutilised space in front of the existing Engineering 1 Building's street level. Adding an additional 3,000m<sup>2</sup> to the existing building, it consists mainly of an arched roof and mezzanine floor.

The centre can accommodate 758 students on two levels. On level 3, there are 252 individual workstations accessible to students on a first-come-first-served basis. There are 30 conceive, design, implement and operate (CDIO)-type venues where groups of seven students can work in a private cubicle equipped with a table and a flat screen monitor. On level 4, there are 296 cubicle seats without workstations.

A unique landscaping project also forms part of the new study centre, entailing the collection of stormwater from the roof of the study centre which, in turn, irrigates tidal ponds and a botanical garden. This is sone of only a few buildings in the world where a rain garden system has been integrated with a building of this type.

Developer: University of Pretoria - Facilities Management

Architects: ARC Architects Pretoria

Project Managers: ARC Architects Pretoria

Quantity Surveyors: Pentad

Civil and Structural Engineers: Aurecon

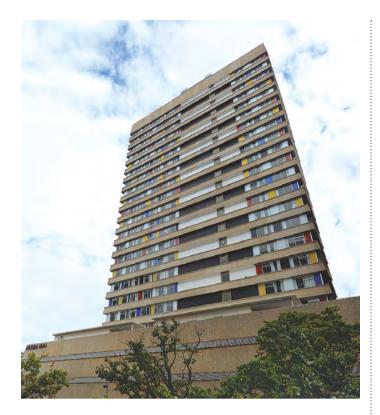
Mechanical Engineers: Spoormaker and Partners

Electrical Engineers: CA du Toit

Fire Consultants: Chimera Fire Protection Main Contractor: Robenco Construction



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## OVERALL TRANSFORMATION AWARD WINNER Noswal Hall

Noswal Hall, Zenprop's first landmark student accommodation development, accommodates 399 University residents across 19 floors. Built over 40 years ago, Noswal Hall is situated directly across the road from the main campus of the University of the Witwatersrand. Its close proximity to the University makes it an attractive offering for Wits students seeking affordable, modern accommodation with easy access.

Rapidly emerging as a vibrant growth node, Braamfontein, in Johannesburg's inner city, is undergoing a significant turnaround, driven significantly by the demand for student accommodation from various tertiary institutions in the area.

The 40 year old building underwent extensive renovations as a result of the design by Empowered Spaces. All existing plumbing, ceilings and windows were replaced, the floor plan was reconfigured for student living and 190 bathrooms and 171 kitchens were installed. The use of primary coloured glass in selected windows has given the building a Mondrian inspired facade that stands out on the Braamfontein skyline.

Approximately 170 flats are configured into bachelor units as well as two, three and four bed sharing units. Each of the floors is divided into nine units. Each unit has a kitchenette equipped with an integrated mini fridge, microwave oven and two plate stove. The building also consists of a communal television room, computer lab, study room and communal laundry. An administration office is located on the ground floor.

**Developer:** Zenprop Property Holdings **Architects:** Empowered Spaces

**Project Managers:** Capex Projects **Quantity Surveyors:** Walker Mare

**Civil and Structural Engineers:** DG Consulting Engineers **Mechanical Engineers:** Adaptive Resource Engineering

Electrical Engineers: Quad Africa

Fire Consultants: TWCE Consulting Engineers

Other Consultants: AR & Associates, Comprac, iSpaces

Main Contractor: Duncanrig

#### HERITAGE AWARD WINNER

New Military Health Base Depot for SAMHS

The Military Health Base Depot (MHBD) is a formation within the South African Military Health Service (SAMHS) responsible for the acquisition, stockpiling and distribution of medical supplies and pharmaceuticals. SAMHS required a larger, more secure and modern base to ensure optimum functioning of this crucial formation within the Department of Defence.

An existing military property of 64,571m<sup>2</sup> in Thaba Tshwane was selected as the most suitable site. A number of the existing buildings on site were identified to have significant heritage value and had to be retained in the new design.

Requirements were met through a campus-type development with 12 buildings of different sizes and functions, including five heritage buildings being restored and creatively adapted for re-use

In keeping with the historic warehouse character and the storage functions of the new buildings, the new design by Impendulo Design Architects and Jeremie Malan Architects, displays an industrial aesthetic. The existing hangar buildings use steel structures and sheeting extensively. Face-brick walls and cantilever roofs are characteristic of the historic railway type platform building.

The forms of the new buildings are plain, uncluttered and modern, providing a design solution that is not overly stylistic but timeless. The buildings are crafted to have a strong, yet not overwhelming presence, that mirrors the role that a healthy military fulfils in society.

The project has been independently assessed to have reached the level of a Four Star Green Star Rating. There is currently no Green Star tool available to certify this type of development and therefore a self-certification was done by an independent green consultant.

**Developer:** Department of Public Works **Architects:** Impendulo Design Architects,

Jeremie Malan Architects

**Project Managers:** Jeremie Malan Architects **Quantity Surveyors:** Mokate Monk & Du Plessis

Civil and Stuctural Engineers: Ntsu Engineering Consultants,

Civil Concepts, Emzansi Engineers Mechanical Engineers: JP Partnership,

Mnjiya Consulting Engineers

Electrical Engineers: Ukhozi Consulting
Fire Consultants: Mnjiya Consulting Engineers
Green Consultants: WSP Green by Design
Main Contractor: Liviero Construction



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## **INNOVATIVE MERIT AWARD WINNER UTi Pharma**

Intaprop developed the R575 million new consolidated head office and distribution campus for leading pharmaceutical distributor, UTi Pharma, at Intaprop's Meadowview Business Estate development in Linbro Park.

The 34,000m<sup>2</sup> world-class warehouse and office facility is located on 67,000m<sup>2</sup> of land. The awards judging panel were impressed by the innovative integrated racking system, the energy efficiency and improved productivity and optimisation of space.

Various sustainable and energy efficient elements are included in the development such as rain water harvesting, reverse cycle heat-pump chillers, and the Cristopia Energy System, designed by C3 Consulting Engineers - a unique technology for thermal energy storage, specifically created for the air-conditioning and industrial refrigeration of commercial and business premises. It allows for the shifting of electricity consumption from peak to off-peak hours.

The development of the UTi Pharma facility required a strong understanding of the client's complex operations and bespoke innovation to develop a strategically located, efficient, distribution-boosting facility to the highest pharmaceutical standards.

The new facility, which has a 38,000 pallet capacity, has enabled UTi Pharma to distribute products to the market more cost effectively, giving it an edge over competitors. The landmark development saw UTi Pharma consolidate eight of its nine Gauteng-based operations into a single greenfield operation.

The building was designed by GLH Architects and was financed by Nedbank.

Developer: Intaprop Architects: GLH Architects Project Managers: Coffey Projects Quantity Surveyors: BTKM Civil and Structural Engineers: L&S

Mechanical Engineers: C3

Electrical Engineers: Taemane Consulting

Fire Consultants: TWCE

Environmental Consultants: Singisa Landscape Architects: Insite Main Contractor: Tiber Bonvec



### **INNOVATIVE MERIT AWARD WINNER** Tshedimosetso House

Tshedimosetso House is the new Government Communication and Information System head office.

Developed by Growthpoint Properties, the design brief entailed the provision of a contemporary office building, located on a prominent site in the historic precinct of Hatfield, Pretoria. The location and specific physical constraints of the site, along with the historical buildings, determined the various design elements and features. The building embodies a design approach that focuses on qualitative integration of the urban context, heritage sensitivities and a balanced technological input.

The integration of Solar Photo Voltaic cells within the laminated glass facades to the east, north and west was used for the first time in Africa. Although the technology has been available for a number of years in Asia, Europe and the Americas, never before has this particular type of PV been introduced to buildings in Africa. In order to determine the efficiency and appropriateness of this technology, two types of PV façade glass fittings are used. This installation was a result of a Façade Solar Research Project carried out by the University of Johannesburg, the University of Edith Cowan (Australia) and Growthpoint Properties.

Designed by ADO Architects, S&A Architects and Urban Concepts, the resultant building design is an amalgamation of site, urban and technological influences and elements - contributing factors to one of the first Green Star rated buildings in Pretoria. Tshedimosetso House was awarded a four star Green SA - Office v1 Design Rating.

**Developer:** Growthpoint Properties Architects: ADO, S&A, Urban Concepts Project Managers: Akwaba Africa Properties QS: AECOM, Lindile Mteza & Associates Civil and Structural Engineers: EDS Mechanical Engineers: Aurecon, MCE Electrical Engineers: Consius Consultants,

Eksteen & Le Roux

Green Consultants: Aurecon, S&A

Fire Consultants: Aurecon

Main Contractor: Murray & Roberts

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Taemane Consulting Consulting Electrical and **Electronic Engineers** 

**Tiber Bonvec Construction** Main Contractor

V & A Waterfront

Developers

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WBHO Construction

Main Contractors

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## WINNING PROJECTS, SAPOA PROPERTY AWARDS



## 2012

- Best International Project & Overall Winner: One & Only The Palm Dubai
- Best Industrial Project:
  Ellerines Distribution Centre, Cape Town
- Best Retail Refurbishment: Sandton City Repositioning

## 2013

- Best Hotel Refurbishment: The Maslow, Sandton
- Best Industrial Project:
  Ellerines Distribution Centre, Port Elizabeth

### 2014

- Best Corporate Office Development, first Cape Town Six-Star Green Rated Building & Overall Winner: No.1 The Silo, V&A Waterfront
- Best Residential Apartments Development
   & First Residential Project to receive a Four-Star
   Green Rated Award:
   No.2 The Silo, V&A Waterfront



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## Alice Lane: An Urban Icon

Alice Lane is a landmark development being added to the Sandton skyline. Situated on the corner of Alice Lane and Fifth Street, Alice Lane is owned by Standard Bank, Pivotal Property Fund and Abland, and is being developed by Abland on behalf of the owners.







hen complete, this will be one of the most desirable addresses in Sandton. Situated opposite Sandton City shopping centre, the site is easily accessible from the M1 freeway and is within walking distance of the Sandton Gautrain station, the Sandton Towers Hotel and the Sandton Convention Centre.

The development consists of three new iconic office towers surrounding a central, streetscaped piazza. The parking will be located below the piazza level and will be accessed either from Alice Lane or Fredman Drive. In total, 70,000m² of premium grade office space is being created in the three towers. The design of these buildings is distinctive and contemporary, with topend finishes throughout.

#### The Piazza

The piazza is a key feature of the design and will be the first of its kind in the area. The intention is to create a pedestrian-friendly, attractive outdoor environment which can be enjoyed by tenants, their visitors and the public. Trees and benches will give it a relaxed and welcoming ambience, while sculptures and artworks will add a touch of style. The public will be able to access amenities such as the Virgin Active gym, restaurants, a hairdresser, dry cleaners, convenience food outlets and a Standard Bank branch.

## Three Phase Development

The entire site is being redeveloped in phases. Phase One was completed by August 2013 and is fully let. This 18,500m² building had to be constructed before the old Standard Bank building on the site was demolished, so that Marsh Africa, which has taken a substantial amount of space in Phase One, could be housed in the bank building while its new premises were being constructed. Abland also concluded an agreement with Virgin Active to put a

gym into the building. The gym occupies 3,600m² below the piazza level, in a space which projects over Fifth Street and offers attractive views of the city. Standard Bank operates its private banking and business banking divisions from the first floor.

The construction of Phase Two has taken place simultaneously with the demolition of the old building. This meant that demolition could not take the form of an implosion and instead the building was carefully dismantled. The safety of all on site has been an important factor, as is ensuring that construction interferes minimally with the operation of Phase One. Phase Two is due for completion in November 2014 and will be fully occupied by Sanlam and Santam.

Phase Three will be the new home of law firm Bowman Gilfillan. Bowman Gilfillan has signed a lease for 22,000m², leaving 13,000m² available for occupation from early 2017.

#### **Green Principles**

The entire precinct has been designed in accordance with the principles of green building – a cornerstone of Abland's development philosophy. Phases One and Two have already been awarded Four Star Green Star SA – Office Design v1 ratings by the Green Building Council of South Africa, and Phase Three will also be submitted for a four star rating.

Although it is not yet complete, the project has not escaped notice. Phase One has received acknowledgement from the property community, winning a SAPOA Award for Innovative Excellence in the Commercial Developments category this year. The fact that it has attracted so many blue chip tenants shows that it is exactly what companies are looking for in a desirable business address.

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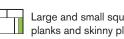
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