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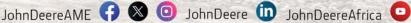
















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A collaborative effort to address SA's future capacity challenges.

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## ON THE COVER

The South African National Roads Agency SOC Limited (SANRAL) announced that it would be investing over R50b in road infrastructure development in the Eastern Cape between now and 2028. Speaking at the Construction Summit held at the East London International Convention Centre on 26 March, Welekazi Ndika, SANRAL's Regional Stakeholder Coordinator, said: "SANRAL's infrastructure investment will be geared towards the construction of new facilities, road improvements and strengthening, routine, ad hoc, periodic and special maintenance of the national road network in the province. In line with our transformation imperatives, a portion of this work will be ringfenced for targeted enterprises, including women, youth, people with disabilities and military veterans."



#### COMMENT

Amidst the extremely depressed state of the construction industry, the International Monetary fund announced in April that South Africa, Africa's most industrialised country, is set to become the continent's biggest economy with a GDP of USD373b. It will retain this position until at least 2027.

E gypt held the top position in 2023, but will slip to second place, primarily because its currency was devalued by some 35% so that it could allow for more loans from the International Monetary Fund. Nigeria, which for some time held the top spot, will fall to fourth place on the continent for similar reasons while Algeria will rise to the third spot.

## A dichotomy

South Africa's newfound status as the biggest economy comes as a surprise for those in the construction industry. The industry is barely hanging on and is at the mercy of many well-documented factors that make any dramatic resurgence soon, impossible. Its reliance has been touted as the reason for it not having collapsed and it seems that the few major infrastructure projects that there currently are, is what keeps it ticking over.

Statistics SA reports that the real value of investment in buildings contracted by close to 6% in Q4 of 2023, which is alarming, but it is most probably because households and businesses chose to invest in solar panels instead of building new structures or renovating.

In an interview I recently did with a



construction materials producer, it was stated that the construction industry shrunk by up to 40% in recent years. This, although the industry already sees and experiences it, puts matters into perspective.

To add to the industry's many challenges, the availability of cheap cement imports is a complicating factor.

On the one side it can be a potential catalyst for revitalising the construction sector as such imports alleviate cost pressures which can in turn revitalise projects that were stalled due to cost pressure.

On the other side, and this is what South African construction material producers are grappling with, is that albeit that such imports offer immediate financial benefit, they pose risks ranging from job losses to economic value erosion.

Also of concern is quality. Yes, cheap cement imports offer immediate financial benefits, but the cheapness may come with a compromise on quality control and this may have serious implications for structural engineers and architects.

In the end, sanity must prevail with this issue. South Africa's construction industry is fighting various battles internally, and fighting the issue of cheap cement imports completes the idea that it is facing a total onslaught. For an industry that has been identified by the powers that be as one of the few industries that can assist with rebuilding the local economy, it feels pretty exposed at the moment.

Wilhelm du Plessis Editor



This issue publishes the second call for entries in *Construction World's* Best Projects awards. This is the 23<sup>rd</sup> time these awards are to be held and will recognise excellence in civil engineering, building, specialist contracting, specialist supply, consulting engineering, and architecture. The AfriSam Innovation Award for Sustainable Construction recognises how a project contributes to sustainability in the built environment.

The deadline for entries is Friday, 6 September.

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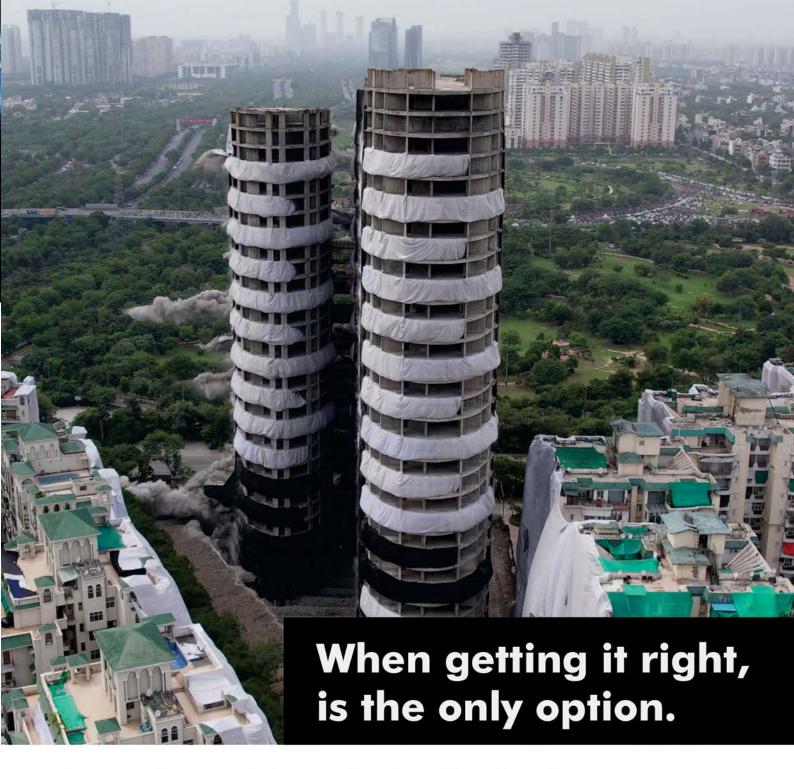


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## Action needed now to restore **CONSTRUCTION INDUSTRY**

Confidence in the construction industry has been erratic since 2020, compelling several industry players to close their doors. Those that remain are exposed to risk, vigilante action and skills shortages due to mass emigration. Government's stated commitment to making regulatory changes and spending on infrastructure do, however, provide some light at the end of the tunnel.

The industry needs a major boost to regain the prosperity of a decade ago," says GVK-Siya Zama CFO, John de Sousa (**pictured**). "Much needs to be done to improve investor confidence and boost the industry. Here, the government

has a major role to play. The finance minister's announcements at the recent budget speech bode well for the industry - if they play out according to plan."

De Sousa's comments come as GVK-Siya Zama's marks its 30-year anniversary since inception in 1994, coinciding with the birth of democracy in South Africa. Since then, it has evolved into one of the largest privately-owned construction companies in the country.

The company's roots, however, can be traced back to the 1960s when it operated as a painting and restoration company focused on smaller projects. Over the years, it grew into a significant player in the construction industry, successfully taking on larger and more complex projects.

Today, GVK-Siya Zama's work has shifted from the highly aesthetic restoration projects of the past, to being part of the construction machinery involved in creating healthcare and education facilities in response to a considerable backlog, underpinned by a growing and a shifting population.

De Sousa, says the advent of a democratic South Africa held much promise three decades ago, albeit with many unknowns for investors at the time. "It also presented an opportunity to address and redress inequality in terms of infrastructure and services; and along with that change, shift the emphasis in public spending.

"In those early days, there was a major drive by the government to invest in infrastructure, hospitals, education facilities and the type of projects that would cement the leadership's foothold in the country. This focus was unfortunately at the cost of unseen infrastructure such as pipelines and reticulation, roads, bridges, water and electricity, challenges that the country is now having to deal with – 30 years on," he adds.

## Government's proposed regulatory amendments for PPPs welcomed

De Sousa says the state needs private sector participation to accelerate projects. "Any vehicle or relaxation of rigid structures and requirements – such as the government's

intention to amend the public-private partnership (PPP) regulatory framework – will help to reduce procedural complexity of undertaking PPPs and contribute to

more streamlined delivery of projects."

In addition, government's recent budget speech announcement that it plans to invest more than R943b in the

refurbishment and maintenance of existing assets and the building of new public infrastructure is welcomed by GVK-Siya Zama.

Commenting on this, De Sousa says: "This is a promising move by government, and we'll watch the space with keen interest."

De Sousa says the company applauds government's plans to transform municipalities into engines of growth through the tightening of budget processes, ramping up of oversight, increasing skills and capacity of municipal employees, and driving investment in maintaining and building infrastructure.

"It's no secret that in recent years, municipalities have not been great at managing finances and delivering projects. Any focus on municipal governance and the eradication of corruption and ineptitude will go a long way towards addressing these challenges," notes De Sousa.

## Moving the industry forward requires decisive action

Looking at the sector as a whole, he says there is enormous pressure on the private sector to finance and move projects forward. "On the flip side of the coin, there is counter pressure from labour as government considers the privatisation of state-owned entities (SOEs). Government is in a bind. It knows what needs to be done, but dealing with these opposing forces on the ground inevitably slows the process down. Decisive action is, however, needed to ensure a sustainable industry," adds De Sousa.

He says economic growth, population growth, increasing unemployment and shrinking public sector spend place even the most reputable contractors in a precarious position.

"At GVK-Siya Zama, we will continue to strive for a sustainable company that provides employment, trains and develops employees, contributes meaningfully to the built environment and turns a profit – we will continue to carry the construction flame high and work with all stakeholders to ensure the industry's longevity in the country," concludes De Sousa. ⊙

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## Effective social and stakeholder engagement ESSENTIAL FOR INFRASTRUCTURE DEVELOPMENT PROJECTS

Behind every successful infrastructure project is an effective stakeholder engagement strategy. This can begin as early as during the design and even concept phase, says Amelia Visagie, Technical Director (pictured) at leading consulting engineering and infrastructure advisory firm Zutari. Visagie, based in Cape Town, heads up Social and Stakeholder Engagement at Zutari, along with fellow Technical Director Tebogo Sebego, based at the Tshwane head office.

our role begins with understanding the interests, values, concerns, perspectives, and needs of various stakeholder groups, as well as assessing the relative influence and power that different stakeholders have on the proposed project," explains Sebego. The broad-based social benefit aspect of any major infrastructure project involves many stakeholders, including communities, government officials, nongovernmental organisations, and traditional authorities.

"If we do not involve communities and stakeholders from the onset, it can pose a major risk, leading to most projects being stopped prematurely," says Visagie. A rule of thumb is that if there is a need for conflict management, it is probably already too late. "This results in us having to undo what has already happened, whereas if we had been involved from the beginning of the tender and proposal phases, we could have worked together with the client and all stakeholders."

When stakeholders' voices are heard, their concerns and expectations can be addressed and managed effectively. This creates a sense of ownership and buyin from stakeholders, increasing their commitment to the project's success. Moreover, engaging stakeholders fosters better communication, transparency, and trust, which contributes to building a collaborative and positive working environment.

"We open up engagement and communication, but most importantly we stay with the project throughout its lifecycle," notes Sebego. An early stage of construction should include establishing a steering committee and selecting community liaison officers. During the construction phase, Zutari undertakes extensive social monitoring, which is vital to the project's success.

"It is exciting to be upfront at the inception of any project," says Visagie. She and Sebego lead the team of social and stakeholder engagement champions. This team specialises in assuring maximum economic sustainability on projects by reducing social risks and enhancing companies' social licences to operate.

These champions conduct perception surveys and asset mapping to ascertain the needs and aspirations of local communities. "We build on that understanding as a basis to co-create an impact in conjunction with the client," says Visagie. Sebego adds that the process is both rigorous and scientific, using tools such as Social Impact Assessment to analyse, monitor, and manage the planned

and unplanned social consequences, both positive and negative, of proposed interventions and any social change processes created by those interventions.

"Once we are on the ground, we collect social or community intelligence which helps our team to understand the social dynamics, knowledge, experience, and attitude of the communities we work in. Such information equips us to know exactly how a community will act or react to the planned intervention. This informs how we plan our engagement in a manner that allows us to systematically identify, analyse, plan, and implement actions designed to ensure that we use the most effective strategy for the stakeholder engagement process," says Sebego.

Visagie adds that such social intelligence is by itself "a pot of gold" for clients, as it is the result of powerful data that is collected. "We accumulate rich data to assist any client to mitigate project risks. It starts by establishing effective communication channels and listening to the voices of the community. It is not a top-down approach, and that is what makes such a huge difference. Instead of going in and just doing a tick-box exercise, we engineer meaningful and sustainable impact." In today's highly competitive business environment, having access to the right data can give clients and project managers a competitive advantage.

Listening to stakeholders is crucial to any project's success. It ensures that their interests are aligned with the project's objectives, builds trust and collaboration, and ultimately leads to better outcomes for all involved.

The scope and demand for the value derived from the impact created by the social and stakeholder engagement team represents a major opportunity for Zutari in South Africa and as it continues to expand its presence into Africa.

International financing institutions such as the World Bank or European Investment Bank require that investors should appropriately assess the environmental and social impacts of development projects. Zutari continues to partner with local consultancies in Africa to deliver successfully on internationally financed infrastructure development projects.

"We capacitate and empower local consultancies by providing strategic guidance, advisory, and review of the final deliverables to ensure that they meet international best practice," concludes Visagie. ⊙

## PPC's Enterprise Development Programme is building STRONG PARTNERSHIPS WITH COMMUNITY FOCUSED SMES

As one of the leading providers of quality building materials in Southern Africa, PPC is not only committed to delivering on its promise of strength and quality through the product it manufactures, but also through the partnerships it nurtures with small businesses that share its commitment to community.



Recently, this commitment of strength through partnership was reiterated when PPC built on its long-standing partnership with Mathacs Civils, a community based brick-making business serving the people of Venda and surrounding areas. As part of PPC's Enterprise Development Programme, the group provided Mathacs Civils with a state-of-the-art brickmaking machine valued at over R440 000. This brings the total number of brickmaking machines operated by Mathacs Civils to three, substantially increasing its production capacity.

Commenting on the partnership, Rajesh Harripersadh, General Manager at PPC Africa, said, "At PPC, we believe in investing in the present to create a better future for all. Our partnership with Mathacs Civils is a testament to this commitment. By providing them with the necessary tools and support, we are empowering the business to grow sustainably and contribute to the development of the communities it serves."

The automated brickmaking machine is capable of producing around 12 000 bricks per day, while maintaining the high levels of quality that Mathacs customers have come to expect from the product they purchase from the business. This addition of a high-tech automated brickmaker to the company's production line will enable it to meet the steadily increasing demand for top quality building materials, and further augment Mathac's steady growth, as evidenced by the recent opening of its second hardware branch in the village of Malavuwe.

PPC's support for Mathacs Civils began in 2006 when the business owner, Azwinndini Mathaulula, first approached the cement manufacturer to supply him with the quality raw materials he needed to deliver on his commitment to manufacturing the highest quality bricks. In a relatively short space of time, and with PPC's support and guidance, Mathacs grew quickly, going from a cash-based business to having a standing credit agreement with PPC for hundreds of thousands of rands. At that point, PPC partnered with Mathacs through its Enterprise Development Programme,

providing the business with a silo valued at over R140 000 for the storage of raw materials and a 5 000ℓ water tank.

Throughout the partnership, PPC has also provided ongoing technical training, advice, and support to ensure that Mathacs Civils' bricks are of the highest possible quality, and align with PPC's own brand promise of "Strength Beyond."

And Mathacs is not the only small building material production business that PPC is helping to grow. "Through our Enterprise Development Programme, we have supported at least seven community-based brick producers, including Mathacs Civils, to expand their operations in recent years," Harripersadh says, "thereby helping them to not only lay solid foundations for sustainable business growth but also increase the number of employment opportunities they create for local community members."

This all-important job creation component is evident in the evolution of Mathacs over the years with PPC's support. Prior to the provision of the brickmaking machine, Mathacs Civils employed 42 workers, 26 of whom were women. Harripersadh says PPC is confident that these numbers will increase exponentially in the coming months and years as the company continues to grow and support the needs of the people and communities it serves.

Harripersadh emphasises that PPC is fully committed to empowering small businesses, particularly those owned by women, in the South African construction and building products sectors through its Enterprise Development Programme. The company encourages all the businesses it supports to employ, train, and upskill women as an integral part of their workforce development efforts. "The success achieved by Mathacs Civils is a reminder that building stronger local businesses is a valuable way to empower the community and enable people to experience a better quality of life," he explains, "and we are very proud to partner with and support their customer and community commitments, including CSI initiatives like their recent involvement in a uniform drive for learners at a local school." ⊙

## Three tips to improve your **EMPLOYEES' PRODUCTIVITY**

Ask any company head or business leader how important employee productivity is to them, and they will tell you that it is right up there with a strong bottom line and a good coffee machine. But productivity, in itself, shouldn't be the starting point; rather, it should be the people.



**S**o says Arjen de Bruin (**pictured**), Group CEO at OIM Consulting, specialists in organisational improvement through front-line leader coaching and development. De Bruin believes that if you adopt a people-first approach, productivity is the natural by-product.

He sees the same challenges across the various industries in which the consultancy operates. "Productivity has always raised an issue, and so we conduct a thorough assessment prior to rolling out our programme, to assess where the problem lies.

"Within mining and manufacturing, as well as warehouse distribution and fast-moving consumer goods, we see a similar competency profile among employees. Planning and organising is typically the poorest competency across the board; followed by analysis and problem-solving; and finally, leadership and development, with only 17% of workers classed as proficient in their roles. We have seen how these areas curtail organisational productivity."

He also highlights that within these industries, assertiveness typically ranks high. "You will find that supervisors are used to operating in a reactive manner; they are assertive and able to handle problems that arise but they're not always able to plan effectively and prevent a problem from occurring, which results in time wastage."

In financial services, the same problems rear their heads, but in a somewhat different order. "Among the staff who form part of the back office operations, we find that planning and organising is typically where it should be, but assertiveness is low. This means that when it comes to critical decision-making, confidence is lacking and this can negatively impact outcomes."

Anecdotally, De Bruin notes that South Africans can also be somewhat erratic when it comes to productivity. "We have periods of extreme productivity, but then sometimes take the pedal off the metal. We're also not inherently process-driven; we need something to make absolute sense to us in order for us to adhere to it, and this can derail us when it comes to our

efforts in the workplace." However, he adds that overall, South Africans have a good work ethic. "We have seen that when employees are empowered with tools and coached to be more consistent in planning and organising, as well as other areas such as analysis and problem-solving, there is a sharp uptick in productivity."

De Bruin shares three tips for companies seeking to get the most out of their employees in the workforce.

## Employees must see how their performance is linked to the big picture

Performance is linked to purpose. Your employees need to see how what they do each day ties into the big picture; how it matters.

The first step is always to clearly define what your company stands for, creating structure and alignment. Employees then need to be brought into the process and shown how these values translate into day-to-day action and behaviour. The energy of employees needs to be focused frequently and leaders need to be visible, engaged and continuously carrying the culture of the organisation.

And not only do employees need to see the link between their performance and the company's operations or strategy, but also how it relates to their own lives; the benefit it can bring them. For example, if the company reaches target, there might be a financial incentive for them, such as a bonus. Or they might gain a new skill and feel more empowered in their role.

#### Teach through training, entrench through coaching

De Bruin says that companies typically invest a great deal in training employees, sending them on courses and to workshops. However, without coaching, these remain cerebral; it's very difficult for these new habits and behaviours to embed themselves in the employee's day-to-day conduct.

Coaching is integral as it helps to entrench theoretical learnings through practical, real-life – and here's the important bit – repeated application. People need guidance; if you want to see an uptick in your employees' performance, look for programmes that offer coaching as a core component of the methodology.

## Collaborate, don't dictate

In De Bruin's experience, he has seen that the best way to get employees on side is through collaboration. "The two worst styles of leadership are autocratic or *laissez-faire*, which means to let people do whatever they like.

"There needs to be engagement and collaboration; people need to feel like their input is heard and their insights are valued. There also needs to be accountability. Yes, sometimes hard decisions need to be made, but consulting with employees beforehand helps to bring them on-side, which will ultimately be reflected in their performance and productivity. Valued employees are engaged employees are productive employees." ⊙

## **TERRAFORCE:** celebrating 45 years of family legacy and retaining wall excellence

Carving out their own path, while honouring a family legacy that spans over four decades, Elgin Rust and Karin Johns (née Rust) are taking over the reins of the retaining wall business conceived 45 years ago by their father, Holger Rust. The dynamic duo is not only driving forward the company's success, but also redefining the role of women in the construction and retaining wall industry.

#### Rooted in innovation

The story of Terraforce is rooted in the vision and entrepreneurial spirit of Holger Rust. In 1979, he began importing gabions, a conventional method of retaining walls, into South Africa. However, he was recognising the need for a more cost-effective, practical and aesthetically pleasing solution. Rust pivoted towards developing innovative earth-retaining solutions that would meet the unique demands of the South African landscape. Growing up surrounded by the construction business, Rust and Johns found their calling, inheriting their father's passion for innovation and excellence.

### The future is female

As women in a (still) predominantly male-dominated industry, Rust and Johns faced numerous challenges along the way. Yet, their resilience and unwavering commitment to quality allowed them to overcome barriers and earn respect within the

construction community. Their journey serves as a testament to the vital role that women play in the built environment.

## **Quality-driven**

In a market where cheaper, less durable replicas are finding their way onto sites, Rust and Johns caution the market to ensure that the product specified, and the one used on site, is indeed a genuine Terraforce product. Citing the technical support, research, testing and engineering excellence that the brand is known for, Rust and Johns affirm the commitment of this heritage company to the local construction industry. Rust and Johns are dedicated to honouring their father's legacy, while charting a new course for the company's future. Their story serves as an inspiration to aspiring female entrepreneurs and professionals, proving that with vision, discipline, determination and a willingness to challenge the status quo, women can thrive in the construction and retaining wall business.  $\odot$ 





# Enza Construction and Tractionel Enterprise DRIVE INFRASTRUCTURE DEVELOPMENT IN SA



Enza Construction, a leading player in the construction industry, and Tractionel Enterprise, a wholly owned subsidiary of Enza specialising in electrical infrastructure, proudly announce a collaborative effort to address South Africa's future capacity challenges and expand into renewable energy initiatives, alongside the rehabilitation of the nation's rail infrastructure.

This drive brings together two industry giants, leveraging Enza's two decades of construction expertise and Tractionel's four-decade-long legacy in delivering robust electrical infrastructure solutions. With a combined experience spanning over 60 years, this partnership is poised to offer unparalleled synergy and become the preferred infrastructure solution provider in South Africa, contributing significantly to the nation's economic growth.

One of the key milestones of this collaboration is the successful completion of Scatec's Kenhardt solar and battery storage facility, a project valued at USD1b. This achievement underscores the group's commitment to pioneering sustainable energy solutions. Building on this success, Enza and Tractionel are set to embark on the Ummbila Emoyeni renewable energy project, a 900 MW hybrid energy facility, marking their inaugural collaboration in the renewable energy sector.

In addition to renewable energy, the Enza Group is deeply invested in revitalising South Africa's rail infrastructure, with Tractionel leading the charge in refurbishment efforts. From the PRASA Moloto Rail Corridor to projects in Pretoria and Johannesburg, Tractionel's expertise ensures the restoration of critical

rail systems, reinforcing their role as the backbone of the nation's integrated transport network.

Looking ahead, the group aims to capitalise on emerging opportunities in energy transmission, particularly through Eskom's transmission incubation program. As one of the few approved companies for this initiative, Tractionel is poised to facilitate the construction of transmission lines, both domestically and internationally, further expanding the group's capabilities and reach.

Commenting on this integrated approach, representatives emphasised the importance of private sector involvement in driving infrastructure development. With Transnet's transition towards private partnerships, Enza and Tractionel are well-positioned to contribute their expertise and support the nation's infrastructure objectives. As the group ventures into new territories, it is committed to strengthening long-term funding relationships and engaging at an equity level to ensure the sustainability of its capital structure. By sharing risk with our partners and providing comprehensive solutions across the value chain, Enza and Tractionel aim to deliver cost-effective solutions that drive South Africa's future growth.  $\odot$ 

## Leveraging Pnet to recruit EXCEPTIONAL TALENT

In the search for top talent in a tough job market, small and medium-sized businesses (SMEs) offer employees certain advantages that big corporations can't – hands-on experience, a variety of tasks, and the chance to learn across different areas and develop specialised skills.



S MEs hire differently from big corporations because they usually don't have dedicated HR staff focused solely on recruiting. Instead, hiring new employees often becomes the responsibility of the business owner. For small or medium-sized business owners, spending time on tasks outside their main business activities can be both frustrating and expensive. When it comes to hiring, you need to find the right candidate quickly.

The good news is that you don't need to be a big corporate to attract and retain the best candidates – you add value just as you are. You do, however, need to recruit differently. Pnet - South Africa's leading online recruitment platform - has job-matching technology that makes the recruitment process both affordable and seamless for recruiters of all sizes.

Here are four benefits of partnering with Pnet to meet your SME recruitment needs:

#### Find the candidates you're looking for with Pnet's Job Listing solution

Although recruiters often headhunt by searching a recruitment platform's database, advertising your job vacancy with a Job Listing can be more advantageous. With a job advert, your vacancy will get promoted to quality candidates beyond the six million registered jobseekers on our database. When you invest in a Pnet Job Listing, your job ad will showcase your company logo and Google Maps location – building awareness of your brand and where you operate from.

Pnet amplifies the reach of your job ads through our partner network of aggregators as well as our extensive

investment in paid media. We also send over 100 million Job Alerts via email every month to candidates who've subscribed to receive these. This reach is important because it means that, no matter how small your business is, you can instantly connect with fresh, new talent – jobseekers who are actively looking for new opportunities and are ready to move.

## 2. Optimise the value of your job ad

If you want to hire better, focus on what you include in your job ads. Writing a good job ad is crucial. The clearer and more detailed you are about the job, the skills you need as well as your company culture and benefits, the better your chances of getting

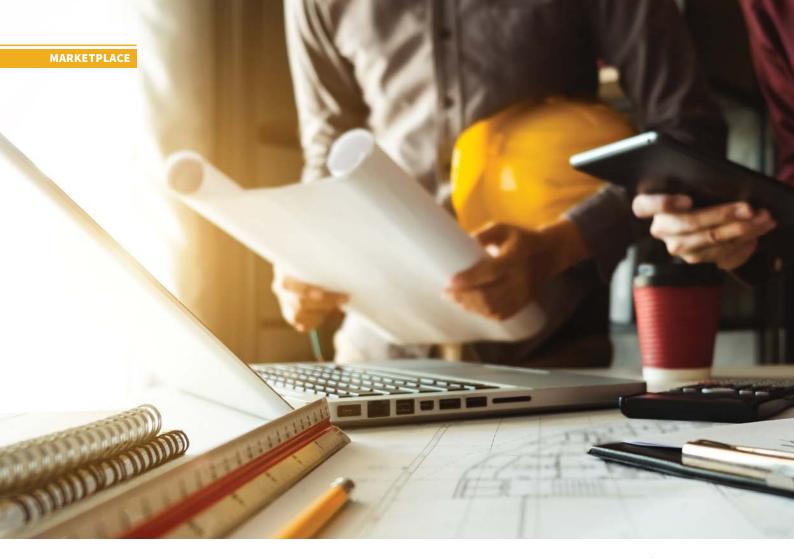
more applications and higher quality candidates for the position.

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Ultimately, you don't need a Talent Acquisition specialist to find the right people for your job openings. By crafting engaging job ads that will attract talent rather than simply including a laundry list of tasks and functions − you can showcase your small business and the job well. ⊙





# The present challenges affecting THE GROWTH OF THE CONSTRUCTION INDUSTRY

The construction industry has contributed 2,7% to this country's overall gross domestic product (GDP) despite its challenges. However, the industry continues to grapple with the following challenges: shortage of skilled labour, public sector capacity to deliver infrastructure projects, loadshedding, slow adoption of technology, business confidence in South Africa, and construction mafias.

By Nosiyabonga Mongane, Quantity Surveyor

## Shortage of skilled labour

In recent years, the construction industry has experienced a shortage of skilled workers. This shortage of skilled workers is one of the factors affecting the success and growth of the construction industry. The demand for skilled labour continues to outstrip the supply due to the growth in infrastructure investment.

The construction industry is affected by a mismatch between available construction workers and required skills, which leads to skilled immigrants being hired over unskilled nationals. This shortage of skilled labour in key construction trades has led to project delays and longer completion times, reduced quality of work, higher labour costs, and lowered client

satisfaction within the construction sector. Closing the skills gap is crucial for meeting growth targets. This calls for both the private and public sectors to invest in structured training programs to contribute to the creation of a pool of critical skills.

This challenge can also be addressed through improved and inclusive procurement practices that will empower and uplift small and medium enterprises (SMMEs). SMMEs play a significant role in the South African economy, contributing to job creation, economic growth, and poverty alleviation.

SMMEs contribute 40 percent of the GDP, and they span various sectors in construction, manufacturing, services, and agriculture. They are also crucial for promoting inclusive economic development.



## Public sector capacity to deliver infrastructure projects

The public sector's capacity to deliver infrastructure has been a topic of discussion and concern. In the South African public sector, capacity is a key constraint in achieving sustainable growth in the construction industry.

Challenges include bureaucratic inefficiencies, budget constraints, skills shortages, and corruption. There is a limited number of experienced personnel to deliver public sector infrastructure.

The lack of built environment professionals within the Supply Chain Management unit, whose scope of professional practice includes procurement, leads to delayed delivery of construction projects. Efforts to improve public sector capacity will have to include reforms, partnerships with the private sector, and investments in skills development and technology.

#### Load-shedding

The country's inability to generate sufficient electricity has affected economic growth. Persistent load-shedding has threatened the growth of the construction industry.

The construction industry relies heavily on electricity to generate power for machinery during construction and also for the production of materials. Loadshedding has thus disrupted work schedules, caused delays, increased costs, and forced contractors to reschedule their projects. Loadshedding has caused instability and unreliability of power, which has resulted in decreased investor confidence and hindered businesses throughout value chains.

## Slow adoption of technology

The construction sector has been slow in adopting new technology and can no longer afford to delay its adoption

due to the potential of technology to grow the industry. The slow adoption of technology in the South African construction industry could be attributed to various factors, such as:

- Lack of awareness: There is a lack of awareness among many construction companies of the latest technological advancements or their potential benefits and returns on investment, which may affect the adoption of technology.
- Cost: Implementing new technologies often requires significant financial investment, which may deter SMMEs from adopting them, especially in a market where profit margins may already be tight.
- Infrastructure challenges: Inadequate infrastructure, such as limited access to high-speed internet or power outages, may inhibit the implementation of technologydriven solutions.
- Resistance to change: Some stakeholders within the industry may resist the adoption of new technologies due to a preference for traditional methods.
- Shortage of skilled personnel: The lack of skilled personnel who are knowledgeable about implementing and utilizing construction technology effectively may deter its adoption.

#### Business confidence in South Africa

Business confidence in the South African construction sector has been fluctuating due to various factors such as economic conditions, political stability, government policies, and infrastructure investment. The South African Chamber of Commerce and Industry (SACCI) released the Business Confidence Index (BCI) for December 2023, which was 112,1, the second highest in 2023 after the January level of 112,9.

The average level for the BCI for both 2022 and 2023 has been 109,6. This was followed by the January 2024 level of 112,3, which may suggest a reasonable sustainable level of business confidence despite several economic challenges facing South Africa.

A reasonable sustainable level of business confidence for the construction industry might mean a steady demand for construction projects, a stable investment outlook, consistent access to financing, and a positive economic environment.

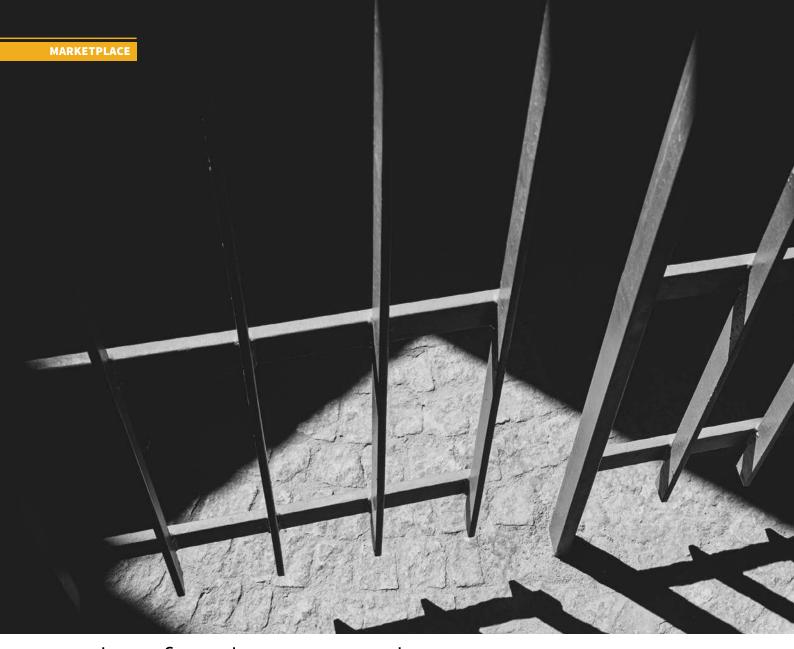
This may foster growth, encourage investment in new projects, and allow construction companies to plan and execute projects with confidence, leading to a stable and thriving industry.

#### **Construction mafia**

The construction mafia is a growing threat to the South African construction industry. These are criminal syndicates that pretend to be local business forums, which are making it difficult for many construction companies to operate. They claim to represent the interests of the unemployed and the marginalised.

These construction mafias infiltrate and demand a share of construction projects, often leading to intimidation, vandalism, arson, theft, and violence. Construction mafias have been causing delays, losses, and risks to the safety and quality of construction projects in South Africa. Government and law enforcement agencies often work together to combat their influence by prosecuting those involved in such activities.

In conclusion, addressing these challenges will require collaborative efforts from the government, industry stakeholders, and the community to create a conducive environment for sustainable growth in the construction industry. ①



# Plan for the worst: how construction FIRMS SHOULD BE PREPARED FOR EXTORTION

Extortion in the construction sector has reached worryingly high levels, derailing and delaying projects worth billions of rands. With no signs of this trend reversing, construction firms should build extortion preparation and best practices into their planning ahead of every project.

This is the advice from Roelof Viljoen, National Project Manager at Business Against Crime South Africa (BACSA). BACSA is the primary point of contact for business interaction with government on crime and corruption through government structures, including the National Priority Committee on Extortion and Violence at Economic sites – a body the Master Builders Association North (MBA North) also participates in.

Viljoen says that extortion in the construction sector is impacting firms across the country, as organised crime seeks new sources of revenue.

He explains that extortion as a crime requires two

factors: the demand for a benefit such as money, work or a contract, as well as a threat of damage or harm to individuals should the demand not be met. Business forums, or so-called construction mafias, are reported to put pressure on developers and contractors to pay them or risk lock-outs, strike action or violence.

"Some of these syndicates are highly organised and linked to legitimate businesses or even highly connected individuals in the community," he says. This, he notes, could make local law enforcement slow to react to complaints.

"Some construction firms simply pay the extortionists so they can get on with business. However, if the extortionists



are paid off, it might work as a short-term solution, but you may have created a precedent and they will likely come back," he says. Giving in to the demands of extortion encompasses corruption that implies the company is guilty. Industry is not opposing development, but cannot contribute to someone's wealth without a return on investment. Alleged slow transformation cannot be a valid reason for crime."

Viljoen says developers and contractors should prepare for possible extortion at every site, training staff and building awareness of the correct procedures to follow should anyone attempt to extort money.

"In principle it's about being aware of who is allowed on site and what the procedures are if extortionists do venture onto the site," he says. "As part of briefings for new staff, you need to outline the procedures for managing extortion. The site manager or another senior person should also be made responsible for managing these situations. You might also need to have external or internal negotiators who manage extortion situations."

Viljoen adds that some developers now also appoint legal representatives to liaise with the local police, notifying them that construction is about to begin and stating the expected police response time should extortionists threaten or delay the project.

"It's important to be prepared," he says. "The key is to identify a possible incident before it starts escalating. Even

if you get a threatening phone call or a threat on WhatsApp, don't just shrug your shoulders. If you as an individual would feel threatened, it qualifies as a risk. If you feel threatened, make a note of it and report it to senior management. If you have on-site security, report it to them too – they will also have procedures and reporting structures in place, and need to know if they should be prepared for an incident."

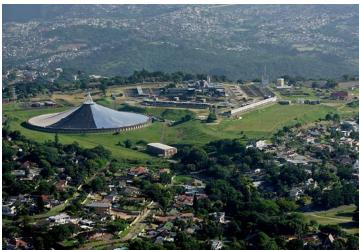
Mohau Mphomela, executive director at MBA North, says it is cause for serious concern that extortion has become so widespread that construction firms now view it as yet another routine challenge. "This form of crime increases the costs of doing business for our members, and puts businesses and jobs at risk. We commend Business Against Crime for coming up with these guidelines, and we urge all members to consider them when preparing to deal with construction extortion," he says.  $\odot$ 

#### BACSA's guidelines include:

- Outline and document a set of safety procedures that must be followed if there is an extortion attempt.
- If the project is a private project/development, place a notice at the entrance stating that the preferential procurement regulations do not apply.
- If it is a public project, place a notice to advertise that preferential procurement regulations have already been complied with.
- · Hold documentation on hand on site to confirm this.
- Seek local sub-contractors to include the local communities before being approached by a Business Forum.
- Do not allow Business Forums on site to discuss preferential procurement options.
- Explain that on-site personnel are not empowered to make decisions about the allocation of work.
- Explain that it is illegal to sub-contract without a bidding and tender process.
- Create a safe area for employees on site. This could prove challenging on new sites, but could be an area as far as possible from entrances.
- Ensure there is an alternative exit if necessary.
- Install CCTV recording equipment if possible. Record any irregular (i.e. not arranged) interaction with a cellphone if necessary, to capture evidence of a situation that may develop into a crime such as extertion
- For operational response, log any extortion incidents with BACSA and the Police. The most efficient method is to involve a service provider participating in the Eyes and Ears Initiative (E2). The latter is an official joint crime fighting initiative between the South African Police Service (SAPS), Business Against Crime South Africa (BACSA) and the Private Security Industry (PSI). E2 records all reported incidents and has direct communication with operational police.
- Every extortion incident shall be recorded as a crime to the Police. A case is not required to be reported at the station in whose area the crime occurred. Once a crime is reported (case number generated) the investigation shall be allocated to the appropriate investigating officer.
- Follow the procedures and guidelines by BAC for successfully prosecuting a case of extortion in the courts.









Construction World's Best Projects showcases excellence in the South African building, civil engineering, supply and project management sectors. In its 23rd year, the aim of **Construction World's** Best Projects is to recognise projects across the entire construction industry: from civil and building projects to professional services to specialist suppliers and contractors.

There are **SEVEN** categories in which to enter. Projects may be entered in several categories, provided they meet the prerequisites for entering each one, and meet the criteria.

This competition is by submission only – it is judged solely by what you submit – so it is essential to take careful note of the entry requirements.

#### **JUDGING**

A panel of independent judges from the construction industry has been appointed. These judges represent ECSA, SAICE, MBA and CIOB.

Each criterion set out for the various categories will be scored out of 10 – with 10 being the highest score and one being the lowest. It is therefore VERY IMPORTANT that the entry address the criteria for the particular category it is entering.

If a criterion is not answered, it will be awarded a medium of

In each category a 'Winner' is announced as well as a 'Highly Commended Award'. A 'Special Mention Award' may be given.

### **SPECIAL ISSUE**

The December issue of Construction World is dedicated to the various winners and entries and is an overview of activity in the entire built industry during the past year.

Contact Erna Oosthuizen, the advertising manager, if you wish to advertise in this issue. Advertising here will associate your brand with excellence.

- Each entry must to accompanied by the completed entry form, available from www.constructionworldmagazine.co.za or by requesting it from constr@crown.co.za.
- The maximum length for submissions is 2 000 words.
- Each submission must clearly state which **category** is entered.
- IT It is to the entrant's own advantage to A as set out in the category being entered. If the criterion falls outside the scope of the contract, please state this. It is advantageous to use the criterion as subheader and then to address this directly.
- The written submission must be accompanied by up to six high resolution photographs with applicable captions.
- The photographs and copy must be submitted separately. The photographs must be .jpgs and the copy in Word (not PDF format).
- The submission must also contain a summary of important project information such as the client, main contract, etc. – i.e. the professional team involved in the project.
- Electronic submissions only.

All the categories have the same prerequisites (unless otherwise stated). These are:

- Only South African civil and building projects that are executed by locally based companies.
- Projects are eligible during the execution of the project and up to 18 months thereafter (within reason).
- Projects must be at least 50% complete at the time of entry.

Information about the format/venue and date of the awards evening will be available in July.

www.constructionworldmagazine.co.za or by requesting it from constr@crown.co.za

For more information contact the editor, Wilhelm du Plessis, on 011 622 4770 or constr@crown.co.za

## Category Civil Engineering Contractors

## Please address the following criteria:

- Construction innovation technology
- Corporate Social Investment
- · Design innovation
- Environmental Impact Consideration
- · Health & Safety

3

- Quantifiable time, cost and quality
- Risk management
- · Motivation facts about the project

### Please address the following criteria:

**Building Contractors** 

- · Construction innovation technology
- · Corporate Social Investment
- Design innovation

Category

2

- Environmental Impact Consideration
- · Health & Safety
- · Quantifiable time, cost and quality
- · Risk management
- Motivation facts about the project

## Category Civil Engineering and Building Contractors (outside South Africa)

 In addition to the common prerequisites, projects outside South Africa must be executed by a South African contractor.

### Please address the following criteria:

- Construction innovation technology
- · Corporate Social Investment
- Design innovation
- Environmental Impact Consideration
- Health & Safety
- · Quantifiable time, cost and quality
- · Risk management
- Motivation facts about the project

## 4 Specialist Contractors or Suppliers

### Please address the following criteria:

- Construction innovation technology
- · Corporate Social Investment
- Design innovation
- Environmental Impact Consideration
- · Health & Safety
- · Quantifiable time, cost and quality
- Risk management
- Motivation facts about the project

## Category Consulting Engineers

## Please address the following criteria:

- · Construction innovation technology
- Corporate Social Investment
- Design innovation
- · Environmental Impact Consideration
- · Health & Safety
- · Quantifiable time, cost and quality
- · Risk management
- Motivation facts about the project

## 6 Category Architects

## Please address the following criteria:

- · Construction innovation technology
- · Corporate Social Investment
- Design innovation
- Environmental Impact Consideration
- · Health & Safety
- · Quantifiable time, cost and quality
- Risk management
- Motivation facts about the project

## 7 TI

## Category The AfriSam Innovation Award for Sustainable Construction

## Please address the following criteria:

- Construction innovation technology
- Corporate Social Investment
- Design innovation
- Environmental Impact Consideration
- · Health & Safety
- · Quantifiable time, cost and quality
- · Risk management
- · Motivation facts about the project

## Constructionworld

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**Entry Deadline** Friday, 6 September at 17:00



## Senqu Bridge PROGRESS

The Polihali Dam will create a 5 042-hectare reservoir at the confluence of the Senqu and Khubelu rivers. The Polihali Dam and the Polihali to Katse Transfer Tunnel are the main water transfer infrastructure works of Phase II of the Lesotho Highlands Water Project.

P hase II adds 2 325 million cubic metres in storage capacity to the LHWP enabling an incremental increase in the volume of water to be transferred to South Africa from 780 to 1 270 million cubic metres per annum, while simultaneously increasing power generation at 'Muela by 40%.

New roads and bridges are required to restore access across the reservoir and connectivity to the national road network.

Three major bridges are being built under Phase II along the Maseru to Mokhotlong A1 road at the Mabunyane, Khubelu and Senqu rivers.

The three major bridges will provide access to Mokhotlong town across the reservoir even at full supply and retain connectivity to the national road network along the A1, the main road between the Mokhotlong district in the mountainous north-east of the country and Maseru, the capital of Lesotho.

The major bridges programme is complemented by the construction of four pedestrian bridges and six vehicle bridges under the feeder roads and bridges programme to maintain connectivity and ensure mobility for communities in the reservoir area. This programme is currently under procurement.

#### About the Sengu Bridge

The Senqu Bridge is the largest of the three major bridges under construction to span the Polihali reservoir.

Almost a kilometre long (825 m) and at a height of 90 m, it will be the first extradosed bridge in Lesotho and is larger than the Mphorosane Bridge on the Malibamats'o River which spans the Katse Dam and was constructed under Phase I of the Lesotho Highlands Water Project. The bridge design has taken into consideration the Mokhotlong highlands' long, cold and



Pier 9 foundation casting. In the background one can see pier 1 which is at the height of the underside of the future deck, Pier 9 will have the highest of the 15 piers reaching approximately 88 m in height.



View of the massive construction site dwarfed by the majesty of the landscape.

harsh winter conditions. Due to the deep valley and the terrain of the area, the deck will be constructed incrementally from both abutments. This construction method will minimise disturbance to the surrounding work area and increase workers' safety. An in-situ segment midspan of the centre span will connect the two parts to form a continuous deck. The pier shape is ideal to be constructed with sliding formwork.

Work on the bridge design started in 2018, led by Zutari, formerly Aurecon Lesotho. Zutari also designed the Mabunyaneng and Khubelu bridges, the other two major bridges to be constructed under Phase II.

The Lesotho Highlands Development Authority awarded the Senqu Bridge construction contract valued at approximately M2 billion to the WRES Senqu Bridge Joint Venture in August 2022.

The WRES Joint Venture includes South African, Lesotho and international companies as per the requirements of the Phase II Agreement. The primary partners are: Webuild S.p.A. (Italy); Raubex Construction (South Africa); Enza Construction (South Africa) and Sigma Construction (Lesotho). Subcontractors include: EXR Construction (South Africa; Gleitbau-Geselschaft (Austria); Post Tensioning and Structural Solutions (South Africa) and Freyssinet International et Cie (France).

The Senqu Bridge is expected to be completed in early 2026.  $\odot$ 



The sliding formwork for Pier 10 (the second highest pier) under assembly. Starting the week of 19 February 2024 and rising slowly and continuously at a rate of 4 m/day the entire 84 m high pier will be cast over 22 days working 24/7 with only one pause at around 60 m, which will be required to extend the tower crane.



Photo shows how the sliding formwork looks when the contractor slid the first pier (Pier 1) late last year. Top platform is for fixing steel, 2<sup>nd</sup> platform for casting concrete and lowest platform for finishing the concrete.

## Geofoam's advantages for road AND BRIDGE CONSTRUCTION

ISO Moulders EPS geofoam offers several advantages for roads and bridge construction, especially when dealing with soft and compressible soil.



Geofoam refers to closed-cell expanded polystyrene (EPS) and meets or exceeds the requirements of ASTM D6817 Standard Specification for Rigid Cellular Polystyrene. Geofoam used in geotechnical engineering applications is cost-effective and does not typically require surcharging, preloading and staging, which is often necessary in construction applications. Geofoam is environmentally friendly, won't contaminant groundwater and is 100% recyclable. Geofoam has been in widespread use in multiple applications globally over a period of more than 25 years.

#### Lightweight

EPS geofoam is manufactured in various densities that typically range from about 12 kg/m³ - 40 kg/m³. As a result, they impart small dead load or stress to underlying soils, structures and utilities. This is especially advantageous where the existing soils are poorly suited to support additional loading (e.g compressible clay, peats, etc.). Existing loads can be significantly reduced by excavating and replacing native soils, which commonly weigh about 1 600 kg per cubic metre, with EPS geofoam. This can eliminate the need for specialised foundations or site preloading to reduce settlement and improve bearing capacity. The use of EPS geofoam over existing utilities can eliminate the need for

utility relocation as zero nett loading can be achieved.

#### Strength

EPS geofoam is available in a range of compressive resistances. A project designer can choose the specific type of Geofoam required to support the design loading while minimising cost. Several different types of EPS geofoam can be specified on a single project to maximise savings. For example, higher strength EPS geofoam can be used in high applied stress areas while lower strength blocks are used in areas where the applied stresses are lower. As a manufactured geosynthetic, the properties are consistent and dependable.

#### Ease of handling

No special equipment is required when building with EPS geofoam. Blocks can be carried and set in place by labourers or easily handled with mechanised equipment. EPS geofoam can be field cut using a hot-wire cutter, hand-saw or chainsaw.

### Construction timeline

ISO Moulders EPS geofoam helps projects maintain extremely tight construction schedules. The ease and

speed with which EPS geofoam can be constructed results in shorter construction time because of faster placement rates, reduced utility relocation and less disruption of traffic. Additionally, adverse weather conditions typically do not affect placement rates of EPS geofoam.

#### Construction cost

In addition to other project costs, using EPS geofoam reduces the loading on adjacent supporting structures. Adjacent structures can be designed to be less robust and therefore less expensive.

This is particularly important for underground utilities.

### Sustainability

EPS geofoam can be reground, recycled and reused in many composite applications such as lightweight concrete, and plastic extrusions.

Compared with traditional fill materials, fewer trucks with lighter loads are required to deliver EPS geofoam to a project site.

This means less pollution from fuel emissions and less wear and tear on the nation's roadways and infrastructure. ①

#### **USES INCLUDE:**

- Roads and highways
- Bridge approaches
- · Void forming in bridges and piers
- Embankments
- · Slope stabilisation
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#### **ADVANTAGES**

- **Ultra-lightweight:** Minimise preloading, surcharging and staged construction, typically 12-40 kg/m<sup>3</sup>
- Weather resistant: Withstands freeze-thaw cycles, moisture and road salts and maintenance free.
- Doesn't settle: Less structural inconsistencies
- Insect and mould resistant: Will not sustain mould or pests.
- Manufactured to meet your job specifications:
   Multiple densities and various block sizes available.
- Ease of installation: Lightweight, moved by hand with no heavy equipment needed, cuts easily with a hot wire or saw
- Environmentally friendly: 100% Recyclable, inert with groundwater, no HCFCs in production





ISO Moulders GeoBlock™ Geofoam Blocks.



## Msikaba Bridge REACHES NEW HEIGHTS

The Msikaba River Bridge forms part of the South African National Roads Agency's N2 Wild Coast Toll Road project. Once complete, the 580 m long mega cable-stayed bridge will cross the Msikaba River Gorge at a height of 192 m, making it one of the highest bridges in the country. This megabridge was designed by HVA Joint Venture (of which SMEC South Africa is the main partner) and is being constructed by the Concor Mota-Engil joint venture. The construction supervision of the project is being undertaken by SMEC South Africa.

Over the past year, the pylons have reached heights close to 80 m and the bridge's four anchor blocks are scheduled for completion by the end of 2023. Preparations for the complex deck construction have commenced with erection of the deck scheduled to start in early 2024. In addition, all five of the tributary structures have reached completion. These include three reinforced concrete drainage culverts (ranging between 67 m and 100 m in length), one reinforced concrete pedestrian culvert and one 32 m long, three-span integral reinforced concrete bridge.

One of the key aspects of the bridge is its two identical, inverted Y-shaped, reinforced concrete pylons. Each of the 127 m tall pylons comprises two inclined legs, straddling the roadway below, and a tall cylindrical spire. The spires have a diameter of 6 m at the bifurcation, where the two legs meet, tapering to 4.5 m at the top.

Anchored into each pylon are 17 pairs of main stay cables (connected to the deck) and 17 pairs of back stay cables (anchored 130 m behind the structure). The cables are

anchored by means of 17 internal structural steel anchorage liners starting at a height of 88 m.

As the pylons are completed up to a height just below the anchorage zones, the next phase of the pylon construction involves the construction of these anchorage zones of the pylons, including the installation of the steel anchorage liners.

These liners form a critical part of the structural system as they transfer the loads, generated by the superstructure, through the stay cables and down into the pylon shafts. The mechanism of load transfer between the steel anchorage liners and the concrete pylon is through shear stud connectors. Each 2 m tall liner has approximately 400 shear studs and weighs approximately 10 tons. The largest liner at the top of the pylon transfers a total of 1400 tons from the pair of main span and back span cables to the pylon. The combined load from all of the liners results in a load on the pylon of more than 20 000 tons at the top of the pylon inclined legs. The liners are locally manufactured



Msikaba Bridge construction (Computer generated image).





Left: Msikaba Bridge construction (October 2023). Right: Typical pylon liner under fabrication (June 2023).

off-site in a facility in Witbank and will be transported to site once complete. The liners will be installed into position using a tower crane. With a construction tolerance of 10 mm, it is important that the liners fit perfectly upon installation. Adjusting the heavy liners at these heights will be a challenge. In addition, the alignment of the stay cable anchor positions is critical to the success of the project. Given the length of the cables (between 185 m and

308 m), the slightest offset on the anchorage position in the pylon will result in large offsets at the opposing anchorage positions located in the deck and anchor blocks. Therefore, before the liners are transported to site, they are preassembled at the fabrication yard and surveyed to ensure fit-up and alignment. The first liner was installed recently with the balance following sequentially as the construction programme progresses. ⊙



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## Multi-billion infrastructure investment

# PIPELINE OUTLINED AT THE EASTERN CAPE'S INAUGURAL CONSTRUCTION SUMMIT

The South African National Roads Agency SOC Limited (SANRAL) announced that it would be investing over R50b in road infrastructure development in the Eastern Cape between now and 2028.

Speaking at the Construction Summit held at the East London International Convention Centre on Tuesday, 26 March, Welekazi Ndika, SANRAL's Regional Stakeholder Coordinator, said: "SANRAL's infrastructure investment will be geared towards the construction of new facilities, road improvements and strengthening, routine, ad hoc, periodic and special maintenance of the national road network in the province. In line with our transformation imperatives, a portion of this work will be ringfenced for targeted enterprises, including women, youth, people with disabilities and military veterans."

In its first instalment this year, the annual Construction Summit is intended to establish a roadmap to a more formalised, sustainable and inclusive construction sector that will see meaningful participation by emerging contractors, said organiser, Motse Mfuleni, Executive Chairman of Imbizo Events. Panel discussions focused on advancing sustainable construction practices to enhance the province's economy beyond democracy, advancing and strengthening sustainable construction regulation and compliance, integrating digital technologies to enhance skills development and empowering the future workforce in the construction industry.

Access to funding and construction work opportunities featured as major challenges for emerging contractors. Shoddy workmanship and prevalent corruption were identified as hindering growth in the sector.

Nokwezi Klaas, Eastern Cape Coordinator of the Sisterhood for Women in Business South Africa (SWIBSA), said that women in construction required more support from government as they continued to reel from the effects of COVID-19. She commended SANRAL's road infrastructure work in the Buffalo City Metro, which has seen training being provided to emerging contractors on a community



development project in KwaTshatshu near Qonce, and local SMMEs currently constructing a five-kilometre community access road.

Luvuyo Popo, President of the African Chamber of Business (ACOB), made a plea to the MEC for Public Works and Infrastructure to establish a committee that would oversee an enterprise development programme for grade 1-4 contractors to ensure opportunities for their participation in the province's infrastructure development programme.

The CIDB grading system was challenged in that it excludes emerging contractors from participating in lucrative contracts. Furthermore, the fact that SMMEs face downgrading in light of limited construction work was flagged as a major setback.

The Board Chairperson of the Small Enterprise Development Agency (SEDA), Xoliswa Daku, outlined their District Eco System Development Model programme aimed at supporting women in the property and construction sectors which is also intended to empower SMMEs to, in turn, contribute to economic growth and job creation. SEDA and the Small Enterprise Finance Agency (SEFA) will soon merge in order to provide a more impactful solution for small enterprises, she said.

Dr Mpumi Mabula, Executive Manager for Infrastructure Planning at the Coega Development Corporation, said that the nature of infrastructure projects is becoming more technical and of a larger scale. "My question to the contractors is what efforts are you making to organise yourselves into consortiums to be able to bid for contracts of this magnitude?"

Reflecting on the achievements of the 6th administration in infrastructure development, Eastern Cape MEC for Public Works and Infrastructure, Ntombovuyo Nkopane, said, "Construction is an enabler of economic development, it helps build investor confidence. We are proud of government's gains of the past five years, which were

achieved during a turbulent economic climate due to COVID-19, corruption and the construction mafia. We applaud the President for steering the ship on a path to economic recovery.

"The Eastern Cape is a construction site from a roads and buildings construction perspective. The Department of Transport, through its implementing agency, SANRAL, is building the monumental Msikaba and Mtentu mega bridges on the N2 Wild Coast Road, as well as upgrading connecting roads that will be tarred."

Nkopane highlighted the major beneficiation being realised on the N2WCR project, including the subcontracting work packages for construction of access roads by locals.

"We are upgrading the N2 between Mthatha to Kokstad, an interchange is being constructed on the N2 near Breidbach in Qonce and the N2 between Makana and Ngqushwa is getting major improvements," said the MEC, further outlining the province's infrastructure achievements, including construction of schools, hospitals, bridges, dams and human settlements.

Furthermore, she expressed concern with the thousands of grade 1 and 2 contractors who are dormant, pointing out that the most active group were contractors of CIDB grades 3-6. She said that efforts should be geared towards ensuring more SMME activity in the higher grades.

The MEC said that the fifth phase of the Extended Public Works Programme (EPWP) would soon be launched, which will present more job opportunities in the sector.

Khulile Nzo, Board Chairperson of the CIDB, said that many contractors do not have capacity and the technical expertise. He said that CIDB will be undertaking an audit exercise to verify the gradings of the contractors as some have acquired their grading fraudulently, which has led to many collapsed and incomplete infrastructure projects. He said that going forward the CIDB would credit SMME owners for academic qualifications and this would help them avoid being registered as grade 1 contractors.

Mbasa Tshombe, Acting Head of Infrastructure South Africa's Technical Task Team, said that their organisation advocated for preferential procurement in infrastructure development.

He said that their focus is on creating a project pipeline and being hands on in the upfront planning to ensure successful project implementation. "Working together with project sponsors, we have announced 12 infrastructure projects with a combined value of R180b that will be implemented across the country, which will create more than 500 000 jobs.

Three of these projects, valued at R15b, will be in the Eastern Cape and present opportunities for local contractors," said Tshombe.

SANRAL's Ndika said: "More needs to be done to professionalise the sector, particularly capacitation of the grade 1 contractors as new entrants to the sector with no prior business management or construction exposure". She emphasised that SANRAL's approach is to ensure that the road infrastructure is continuously maintained to preserve it and to prolong its lifespan.

"SANRAL appreciates platforms such as this construction summit. Engagements of this nature bolster our collaborative efforts as a sector and will fast track the realisation of a more inclusive construction industry where historically marginalised sections of society will derive a fair opportunity to participate in the province's infrastructure development," Ndika said. ⊙

## PERI South Africa:

## EMBRACING CHANGE AND CUSTOMER-CENTRICITY

As PERI South Africa ushers in a new era under vibrant leadership, the changes signal a dynamic shift in PERI South Africa and the construction sector. In a candid conversation with Jaco Vermeulen, the newly appointed Managing Director, Construction World gained insights into the company's ethos and aspirations for the year.

ooking ahead, PERI South Africa recognises the imperative of adapting to evolving customer needs in a dynamic industry. With a focus on innovation and customer-centricity, PERI South Africa is poised to embrace emerging trends in product quality and safety. By integrating cutting-edge technology, such as PERI Quick-solve, into their digital solutions portfolio, PERI aims to enhance construction efficiency, safety, and customer-service.

In 2024, PERI South Africa's strategic roadmap revolves around prioritising the customer experience. With a "customer-first approach," PERI South Africa seeks to foster positive relationships and gain deeper insights into

customer requirements by developing tailored products and innovative engineering solutions. PERI aims to simplify project complexities and ensure timely, high-quality project completion. Guided by the PERI 2025 strategy, which emphasises digitisation, segmentation, and sustainability, the company remains committed to excellence and sustainable practices. As PERI South Africa embarks on this transformative journey, collaboration, innovation, and customer-centricity will serve as the cornerstones of their endeavours. With a resilient team and a forward-looking vision, PERI South Africa is poised to redefine standards and drive positive change in the construction industry.  $\odot$ 

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## PRACTICES MUST INCLUDE GLASS RECYCLING

As global construction and demolition (C&D) waste surpasses 25% of total waste production, the imperative for sustainable practices intensifies. Recent research underscores the pivotal role of glass recycling in demolitions, shedding light on its substantial contributions to sustainability and the evolution of circular construction.



Ate Bester (**pictured**), Contracts and Project Manager at Jet Demolition, emphasises the significance of a carefully engineered approach in large-scale, technically challenging projects, dispelling the misconception of demolition as merely 'reverse construction'.

In C&D waste, recycling emerges as a potent mitigation measure to curtail landslides, lower energy consumption, offset construction industry greenhouse gas emissions, recover valuable materials, create jobs, and preserve natural resources.

Bester underscores the critical role of glass recycling during demolition, highlighting its status as an endlessly recyclable material that, despite its unique resource conservation potential, often ends up in South African landfills or as aggregate.

Efforts to achieve a 50% glass-recycling rate in the United States could divert millions of tons of material from landfills annually, significantly reducing greenhouse gas emissions. Moreover, glass recycling holds the promise of mitigating emissions from glass manufacturing, a sector responsible for at least 86 million tonnes of carbon dioxide yearly.

Bester acknowledges the challenges facing glass recycling, including safety hazards, transportation costs, and the rise of

alternative materials, but underscores its continuing role in circular construction.

However, recycled glass remains a key player in circular construction. The architectural glass industry showcases the potential for a scalable circular economy by developing firesafe building claddings using recycled glass.

This cladding offers a cost-effective, structurally robust, fire-resistant solution that can be easily recycled upon demolition, demonstrating a circular-economy solution to address a significant waste stream.

The standard glass recycling process in construction and industrial sites comprises four main steps: dismantling, collection, segregation, and treatment.

These steps ensure the safe and practical removal of glass from structures, subsequent collection, segregation from other materials, and treatment to remove pollutants, making the glass ready for recycling.

Bester concludes: "Recycling glass in construction is an environmentally beneficial and crucial consideration for any demolition or refurbishment project. It plays a vital role in waste reduction, energy conservation, and carbon emission reduction."  $\odot$ 

## VERSATILE ROLLER gets an upgrade

South Africa's best-loved walk behind roller has received significant upgrades that stretch its versatility far beyond the ordinary and extends its effectiveness to more types of job sites.

With multiple settings for standard compaction of substructures on construction sites or more specialised roads settings, the Ammann ARW65 takes the place of several different types of rollers where its range of vibratory frequencies allow it to punch well above its weight in certain applications, while its manoeuvrability, controllability and advanced safety features make it an excellent option in tight quarters.

Craig Sheppard of ELB Equipment, local distributors of Ammann equipment, says the Ammann ARW65's versatility isn't the only reason it is a top seller throughout the entire southern African region, it is also due to its durability and reliability in extreme conditions. Whereas other types of vibratory rollers have complex drive systems and other mechanisms, the trustworthy green and yellow machine has a fully hydraulic drive with no need for high maintenance centrifugal clutch and V-belts.

The hydrostatic drive also provides improved traction and gradeability with individual drive motors in both drums for smooth topping and starting which is essential in asphalt applications. With the weight adjustable vibratory system set between the two drums the machine is perfectly balanced and settable with two frequency and two centrifugal forces and compaction of up to 30 cm on sand and 20 cm on soil. These combine to give the machine the most possible versatility and

useability on the widest range of work sites.

Other highlights of the new champion Ammann ARW65 walkbehind roller include:

- · Large anti-corrosion 60 litre water tank
- Hydraulic cooling system
- Isolated guide handle with height setting
- · Central lifting points for secure transport and loading
- Easily accessible maintenance points
- Operating weight of just over 700 kg
- 650 mm drum width
- Efficient design with no snag points
- Easy to set hydrostatic drive and vibration system
- Choice of either Yanmar or Hatz diesel engines
- Standard off-site monitoring with Ammann Service-Link monitoring software
- · Legendary reliability
- Vibrant new colour scheme

"Ammann have made the most versatile walk-behind roller even better and focused on some of the small things that make a big difference to easier and safer operation on site. Its difficult to think that such a well-loved machine can be improved, yet Amman has done a fine job of updating it to suit local requirements," says Sheppard.  $\odot$ 



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# Thousands of jobs created and thousands TRAINED ON SANRAL'S R20B N2 WILD COAST ROAD PROJECT

The South African National Roads Agency SOC Limited (SANRAL) has reported that its flagship N2 Wild Coast Road (N2WCR) project has generated more than 3 000 local jobs to date.

S ANRAL provided the report during a two-day N2WCR Political Oversight Committee (POC) session held with traditional leadership and local stakeholders at the Wild Coast Sun in Bizana.

SANRAL's regional manager, Mbulelo Peterson, said that 3 069 jobs had been created for locals, excluding the site staff and team of professionals working on the project. Peterson said that 2 906 locals had undergone various skills development training programmes, including welding, brick and block laying, computer skills, catering, community training and crop production. Additionally, Construction Skills Development Goals (CSDG) training has been provided to more than 53 beneficiaries.

"The N2 Wild Coast Road project has created opportunities for participation by more than 418 emerging enterprises and, over and above this, we have realised indirect benefits from the provision of accommodation, supply of fuel, catering and hardware to many other economic spinoffs," said Peterson.

The project is progressing well with the construction of the Mtentu Bridge having recently commenced and the Msikaba Bridge pylons having exceeded the 80% mark at 86,2 metres out of a 126,7 metre height. With the Msikaba Bridge at an advanced construction stage and the launching of the bridge deck anticipated later in the year, more than R106,4m in wages have been paid to targeted labour to date, while more than R629,8m has been spent on targeted small, medium and micro enterprises (SMMEs).

Eastern Cape Transport and Community Safety MEC, Xolile Nqatha who chairs the POC, said the construction of the two bridges in Pondoland is set make history in Africa and beyond. He said the current government leadership should lead by example as it is tasked with ensuring that the project succeeds as part of its legacy and for the benefit of future

generations. "It is important for the local business fraternity and community to unite and speak with one voice. Your unity and collective power are important to the success of this project," said Ngatha.

The traditional leadership, business sector, municipalities and Project Liaison Committees took turns applauding the work of SANRAL while registering challenges presented by the project.

Belekazi Sikutshwa Thole, Secretary of the Bizana Business Chamber, expressed her appreciation for the engagement and emphasised the strong representation achieved. In a poignant statement, she remarked, "SANRAL has put women on the map. I am so passionate because I am one of them. It is really difficult to be in this space, and we need support, but women must make a difference."

Port St Johns Business Chamber chairperson, Nzamela Ncoyini, said that 30 years into the country's democracy, the 30 percent share must change. "We are previously disadvantaged. It seems we continue to be disadvantaged because there is no advantage in putting aside 30% for the majority of the people. This is a policy matter that government should look at addressing," said Ncoyini.

The business stakeholders said that it was important for SANRAL to prioritise mentorship and skills development on the project and that they were happy with the recent appointment of an independent SMME mentor. They also condemned the vandalising of infrastructure by aggrieved parties as it reversed the gains of local development.

OR Tambo District Executive Mayor, Mesuli Ngqondwana, articulated his appreciation for the collaboration exhibited by the three spheres of government to ensure the smooth implementation of the project and acknowledged the valuable concerns raised by stakeholders. "It is clear, though, that there are areas that still need focus to ensure





Left: MEC for Transport, Safety & Liaison - Xolile Ngatha. Right: Attendees of POC engagement with Stakeholders.

that we fight the misrepresentation of stakeholders by minority groups, who sometimes exploit legal authorities to undermine the will of the majority," said Ngqondwana.

Traditional leaders welcomed the work being done by SANRAL to develop the Pondoland area and appreciated the open channels of communication availed by the roads agency to engage on any contentious matters. They said that although there are challenges from time to time, traditional leaders should make use of the available platforms to express them and not hold projects up. Chief Gcinizizwe Mkwedini, of Qaukeni village near Lusikisiki, pleaded with SANRAL to expedite the resolution of the issue halting implementation of the R2,2b road construction between Lingeni and Msikaba that has been interdicted.

Chief Lunga Baleni, of the Amadiba village, said that there is room for improvement in the communication around the progress and project updates, so as to ensure that all parties are on the same page and to dispel any misinformation.

The R20b-rand N2WCR project is strategically positioned on the N2, which connects four provinces: Western Cape,

Eastern Cape, KwaZulu-Natal and Mpumalanga, and traversing the major towns of Cape Town, George, Port Elizabeth, East London, Mthatha, Durban and Ermelo. It entails construction of the two mega bridges at Msikaba and Mtentu and is set to reduce travel time between the Eastern Cape and KwaZulu-Natal by about two hours. One of the upcoming milestones for Msikaba Bridge is the launch of the deck anticipated by the end of June 2024.

The socio-economic impact of the N2WCR project offers a significant economic injection for local communities. The minimum 30% expenditure earmarked for targeted enterprise subcontractors and suppliers will result in more than R4b flowing to SMMEs, the majority of which will be from the OR Tambo and Alfred Nzo district municipalities. Construction work will create approximately 8 000 direct full-time equivalent (FTE) jobs, with a wage bill of roughly R750m, and between 21 300 and 28 100 indirect jobs. Once the road is completed, ongoing operational work is anticipated to create 900 direct jobs and up to 18 900 indirect jobs. ⊙





## Roadsmart **ASPHALTING**

Roadsmart is the specialist asphalt surfacing division of the well-known Cape Town-based Civils 2000 Group. The company has been providing quality infrastructure services to developers, municipalities, provincial and national road authorities in the civil engineering space since 2002. The relationships with clients and partners have been built on a foundation of quality, safety and reliability.

**G** ary Petersen, Roadsmart's dynamic General Manager, knows that the company's solid performance and reputation for quality and agility is no accident. "We have a lot of experience in our teams in the field and in the management team, and we leverage that experience to bring a solution-oriented focus to our projects. We operate a flat management structure, that facilitates good communication and a proactive approach".

The technical staff are members of the Society of Asphalt Technology and South African Bitumen Association (SABITA). The management team is invested in providing a quality finished product and innovative mindset that helps Roadsmart solve their clients' problems quickly and deliver the job effectively.

Roadsmart's services are not restricted to asphalt surfacing, and while asphalting might be the mainstay of the company's

offering, a large proportion of work also includes road rehabilitation involving cement and bitumen stabilisation, chip and spray seals, and slurry seals, as well as routine road maintenance operations such as patching, edge repairs, guardrail replacements, line marking and road sign replacement.

"Our production levels and efficiency are constantly monitored, and our experienced teams balances output with attention to quality control and safety. We are continually investing in state-of-the-art construction plant and operate a large fleet of asphalt and road rehabilitation equipment," says Petersen.

The experienced teams, modern plant and close relationships with long-standing





suppliers allow Roadsmart to consistently complete projects to time and budget.

Roadsmart has been on the City of Cape Town's routine road maintenance panel for 15 years and undertakes a substantial amount of work for the City of Cape Town, provincial and national road authorities, as well as private developers.

Whilst Roadsmart has a long history stretching back over 20 years, it is also committed to its future. With CIDB ratings of 6SB and 6CE, and Level 1 B-BBEE accreditation, Roadsmart is committed to transformation and a brighter future for all. It works well with the communities in which it is operating, providing significant work opportunities, and training of the community.

Roadsmart's agility was recently demonstrated when the 2023 floods cut over the N2 near Bot Rivier and the bridge approaches were washed away. Much to the relief of the client, Roadsmart stepped in and reconstructed the approaches in record time and had the N2 open for the December holiday season.

Looking ahead, current projects include the rehabilitation of the N2 from Houwhoek Pass to Caledon, the resurfacing of the N1 from the Koelenhof Interchange to Market Street, Paarl, in the Cape Winelands. With sister company Civils 2000 currently

undertaking three sections of the City of Cape Town's Integrated Rapid Transport Phase 2A Plan (a large-scale programme of infrastructure development to provide public transport along the city's busiest transport corridors from Khayelitsha to Wynberg and Claremont), Roadsmart will provide the asphalting and rehabilitation work for these projects, contributing to a healthy order book.

Roadsmart's commitment to quality, innovation, agility, and sustainability make the company the ideal partner for infrastructure construction projects and with an eye on growth it should see them continuing to deliver projects to satisfied clients well into the future.  $\odot$ 







## Acquisition **APPROVED**

Afrimat, a leading mid-tier mining and materials company providing construction materials, bulk commodities, industrial minerals and future materials and metals, notified shareholders that the Competition Tribunal granted approval for the Lafarge acquisition. All other regulatory authority approvals have been granted.

n a Stock Exchange News Service ("SENS") announcement, the CEO of Afrimat, Andries van Heerden, indicated that this exciting deal forms part of the Afrimat Group's ongoing diversification strategy. "It will increase Afrimat's offering in the construction materials space, by expanding the Group's quarry and ready-mix operations nationally. Additionally, access to the fly ash operations provides a foothold into the cement extender market. The grinding plant will allow Afrimat to grind various materials as value-added products for our current and new customers, while the cement kilns allow the Group to enter the cement value chain competitively."

For this acquisition, Afrimat entered into a share purchase agreement with a Holcim Group subsidiary, Caricement B.V., in which Afrimat will acquire 100% of the issued share capital of Lafarge South Africa Holdings Proprietary Limited. The acquisition has been structured as a locked box transaction, effective 31 December 2022, and the purchase consideration payable is in the amount of USD6m. In addition to this, Afrimat agreed to repay or procure the repayment of the loan amounts owed equating to R900m.

All conditions have now been met, including the requisite Competition Authorities, with the Minister of Mineral Resources and Energy of South Africa having approved the acquisition in terms of section 11 of the Mineral and Petroleum Resources
Development Act No. 28 of 2002 and the Financial Surveillance
Department of the South African Reserve Bank approving the
acquisition in terms of the Exchange Control Regulations.

Van Heerden said, "We believe our efficiency drives and breadth of marketing in the construction materials industry will ensure a contribution at an operating profit level, further diversifying the Group's profitability and ensuring long-term sustainability."

The Lafarge acquisition will be integrated into the Construction Materials segment of Afrimat, with van Heerden adding that, "the time is perfect for Afrimat to return to its roots of quarrying and aggerates to support long-term diversified sustainability across the Group."

In the most recent interim results announcement, the Construction Materials segment reported a significant improvement in operating profit, which increased by 113,5%, reaching R156,1m from the previous comparable period of R73,1m.

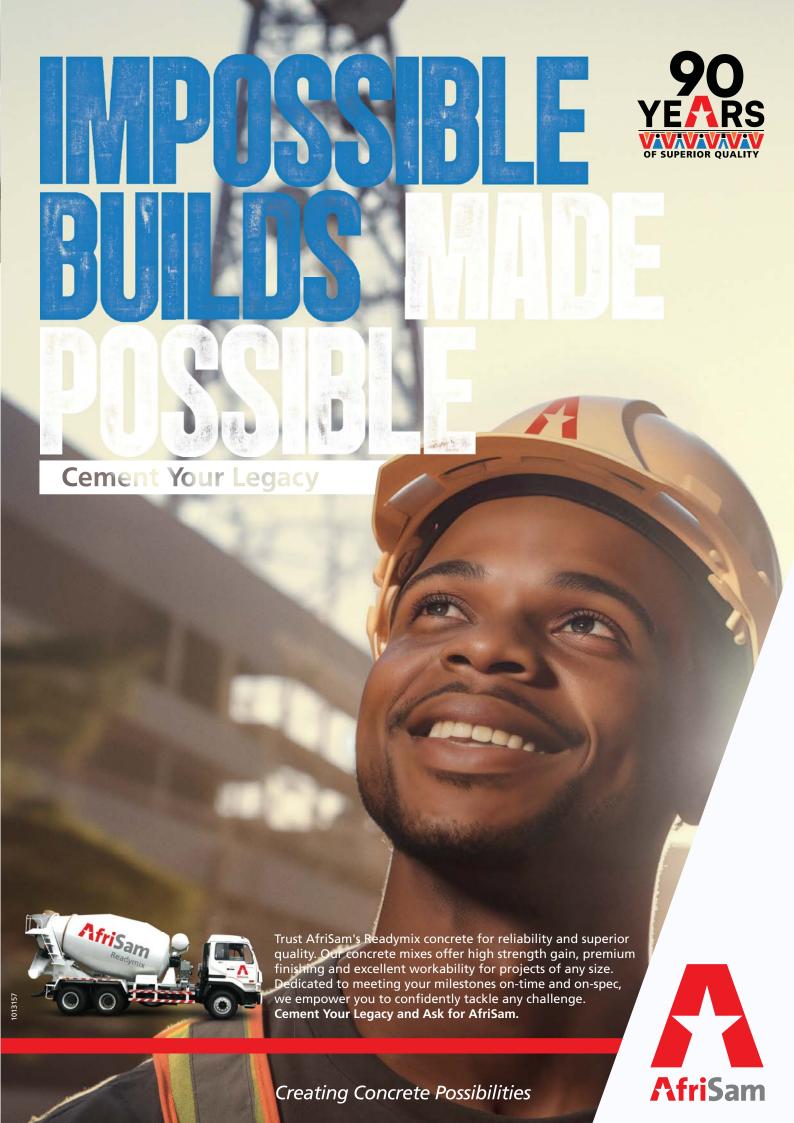
Van Heerden explained this was due to efficiency improvement initiatives which proved to be successful across the segment. Increased activity in road and rail projects resulted in stronger demand for products used in roadbuilding,

rail and infrastructure projects.

Van Heerden said, "We have appointed our Chief Financial Officer, Pieter de Wit, as the full-time Integration Manager. He will, together with experienced leadership and an integration team, focus on ensuring this process is as transparent and uncomplicated as possible. We will ensure that we utilise the skills within both Afrimat and Lafarge SA during the integration process to optimise efficiencies, productivity, and profitability."

Van Heerden concluded by saying, "We trust that the employees, suppliers, and customers who are joining us because of the acquisition will have a successful journey with Afrimat, and we welcome them as part of our extended organisation." ⊙





## Development of Cape Town's THE RUBIK NEARS COMPLETION

Cape Town's skyline is reaching new heights as The Rubik, a dazzling luxury apartment complex in the heart of the CBD, has reached the peak of its vertical ascent. With 27 levels of premium living and commercial spaces, The Rubik's modern glass exterior promises residents and businesses unrivalled views of the city – from shimmering ocean to majestic mountain vistas.

The Rubik was set for occupancy starting April 2024 with a multifaceted offering of residential apartments, sophisticated retail options and sleek offices.

Abland Property Developers, the innovative force behind The Rubik and known for their sweeping imprint on Cape Town's urban landscape, have spearheaded this project in conjunction with Nedbank CIB, Giflo Group and WBHO.

The Rubik builds on Abland's legacy of architecturally significant developments in the Mother City, such as 22 Bree and 35 Lower Long – both bearing a prestigious 4-Star Green Star rating from the Green Building Council of South Africa (GBCSA). This third venture adds another striking structure to Cape Town's CBD at the intersection of Loop and Riebeek Streets.

In light of the overwhelming demand for The Rubik's apartments – including one- and two-bedroom apartments and exclusive penthouses – Grant Silverman (**pictured**), Director at Abland Property Developers, sees great potential for additional residential projects within Cape Town.

With a total of 87 luxurious units filled with natural light, over 4 800 m² of premium sectional-title offices and nearly 400 m² of retail area, this mixed-use landmark is elegantly structured, and has the benefit of expansive parking facilities. Retail outlets grace two levels and office spaces span seven floors, while a separate entrance ushers residents up to opulent living that culminates in nine penthouses with private terraces and an alluring rooftop pool deck.

With a design conceived by the renowned dhk Architects, The Rubik exemplifies state-of-the-art living: high-security concierge facilities operate around the clock alongside cuttingedge technology features and premium minimalist interiors.

For those seeking to partake in vibrant city life from a bird's-eye view, these residences begin at R2,3m. The apartments are already more than 85% sold in response to significant investor yields bolstered by The Rubik's refined design, prime location and world-class amenities.

The Rubik stands within easy reach of Cape Town's diverse culinary scene and effervescent cultural hubs such as museums and art galleries as well as significant historical sites. It lies along convenient MyCiti Bus routes near the Cape Town International Convention Centre (CTICC) and minutes away from the global landmark that is the V&A Waterfront.

Its strategic position near the financial district only adds to its allure as an optimal business location. "The Rubik's P-grade office spaces are tailor-made for today's business environment. National and international companies covet these types of spaces for their rich amenities and flexible designs," comments Silverman. The Rubik P-grade office space includes seven floors of 700 m² each, and its two retail opportunities span 130 m² and 273 m².

"With its unparalleled offerings for both business and luxury lifestyle within one iconic edifice, The Rubik is set to redefine urban living within this historically rich yet dynamically evolving urban quarter of Cape Town," says Silverman. ⊙



## Mbhashe LG Mall's abstract geometric PATTERNS A DISTINCTIVE FEATURE

Construction on Mbhashe LG Mall in Mbhashe, Eastern Cape, has begun. The new rural retail centre will open in early 2025. Mbhashe LG Mall was designed by MDS Architecture, in association with Architects Unbound, for owners Exemplar REItail, McCormick Property Development, and codeveloper Seven Days Trading.

ouis Pretorius, MDS Architecture partner, says that the design of the structure utilizes a geometric pattern to mark the entrance as well as to break up the three-metre-wide covered walkways.

"Matching abstract geometric pattern structures appear to hold up the porte cochere at the main entrance. While the colour palette of the main structure is subdued in hues of grey, the steel geometric structures stand out in a contrasting pure white colour," says Pretorius.

The V-shaped geometric patterns are repeated alongside the curved food court area with outside seating. Flooring along the covered walkways takes the form of hard-wearing brick paving. Inside, the length of the mall leading to anchor tenant Shoprite is awash with natural light from clerestorey windows. Pixelated patterns using porcelain tiles demarcate walkways and lead the eye towards the supermarket entrance.

Offering 20 131 m<sup>2</sup> of GLA, Mbhashe LG Mall will also include artwork murals by local artists. A new traffic circle creates access to the shopping centre on the N2 national route passing through the town of Idutywa.

The design of Mbhashe LG Mall was informed by the local natural landscape, vegetation and the nearby Mbhashe river.

| PROFESSIONAL TEAM    |  |
|----------------------|--|
| Architects:          | MDS Architecture, in association with:<br>Architects Unbound |
| Developers:          | Exemplar REItail Ltd/McCormick Property<br>Development       |
| Co-Developers:       | Seven Days Trading   |
| Quantity Surveyor:   | Quanticost Quantity Surveyors                                |
| Civil Engineer:      | Africoast Consulting Engineers                               |
| Structural Engineer: | Struxit Projects   |
| Electrical Engineer: | Ingplan Consulting Engineers                                 |
| Mechanical Engineer: | Pretocon   |
| Fire Engineer:       | Pretocon   |
| Main Contractor:     | Mike Buyskes Construction                                    |

The greenfield development is designed to be built on split levels to address the sloping site. Water is obtained from an existing borehole on the site.

The building offers parking for 493 vehicles and a taxi rank with 40 bays. The anchor tenants are Boxer and Shoprite, with national tenants making up the balance of the shopping options. ⊙

## Kumba contributes R27m TO HOUSING PROJECT

In an excellent example of a successful Public - Private Partnership, Kumba Iron Ore and the Department of Cooperative Governance, Human Settlements and Traditional Affairs (CoGHSTA), Northern Cape, delivered 142 Breaking New Ground homes to the Siyathemba community in Gamagara Municipality.

Addressing stakeholders at the handover ceremony, Lorraine Scheepers – Principal of Mineral Rights and Permitting at Kumba Iron Ore, spoke of the value of the partnership. "This collaboration marks a significant milestone for community development and empowerment between the private and public sectors. We proudly stand here to witness the handing over of 10 out of 142 BNG housing projects, a testament to our collective commitment to community development.

Built by CoGHSTA, 10 of the 142 homes were officially handed over to their new owners by the department's MEC - Bentley Vass, alongside Gamagara Municipality Mayor – Johannes Roman and Kumba Iron Ore representatives. As a responsible corporate citizen, Kumba has contributed by donating the 142 serviced stands to the Gamagara Municipality and installing electrical infrastructure to the cumulative value of approximately R27m.

In addition to the serviced stand, Kumba is donating the newly renovated Siyathemba Flats, comprising 104 units on

approximately 2 ha of land, to the Gamagara Municipality for renter housing. We're working with the municipality to convert the flats to a sectional title homeownership scheme, enabling occupants to obtain title deeds to the units."

Altogether, the partnership between Kumba Iron Ore and the government will unlock housing for over 200 families, ensuring that communities are uplifted and can be afforded the opportunity to play meaningful roles within society.

Speaking on the project, MEC – Bentley Vass gave his view on the partnership. "We have a backlog of 84 000 units in the Northern Cape, It gives you an indication of the housing development challenges.

We need partners like Kumba and the private sector to help the government improve our people's lives. My message for our beneficiaries is to look after your houses, plant trees and paint the walls. And to our partners, we appreciate the support you have given to our communities."  $\odot$ 



# Nordex Energy expands its horizons in the **SOUTH AFRICAN RENEWABLE ENERGY MARKET**

A quarter into 2024 and the South African private off-taker market is already delivering investment, jobs and commercial agreements.

This is reflected in the wind power sector with a leading turbine manufacturer, announcing a 75% increase in its current generation capacity in operation as well as plans to locally manufacture concrete tower sections in the Eastern Cape Province, ushering in the creation of up to 300 jobs within the region. Nordex Energy South Africa announced that this additional 830 MWs of operational capacity, will start feeding into the country's energy grid by mid-2025, delivering thousands of GWhs per annum into the private market to help drive industry and economic recovery.

David Moncasi Hortet, Head of Sales, Africa, at Nordex Energy South Africa (NESA), said "Our increased commitment in South Africa, including a significant addition to our order book and growing market share, demonstrates our confidence in the renewable energy sector here. We're focused on adding valuable energy resources to the country's grid and supporting the broader shift towards sustainable energy, and delivering jobs."

This follows closely on the heels of the financial closure of EDF Renewables' Korosun 2 cluster, consisting of the Umsobomvu and Hartebeesthoek projects, in the Eastern and Western Cape, which comprises 50 Nordex 5.9 MW turbines with a total capacity of 295 MW.

Nordex has similarly confirmed its role in supplying 57 Nordex WTG Delta4000 series turbines for a R9b cluster of three wind farms, in the Eastern Cape, with a combined capacity of 336MW, which will make for the largest purely private renewable energy facility in South Africa.

Approximately 1 400 keystones conforming the 57 towers for this cluster of IPPs will be produced locally at a newly established manufacturing facility in Humansdorp, situated around 1,5 hours from the Port of Ngqura. This facility, dedicated to fabricating the 120 m high towers, is expected to begin operations by June 2024, with the initial turbine installations scheduled for the latter second half of 2024.

The subsequent energy delivery to the grid, anticipated

in the second half of 2025, will contribute significantly to mitigating the country's energy shortages.

NESA is tasked with the Operations and Maintenance (O&M) of these wind farms throughout their 20-year lifespan, underscoring the demand for skilled personnel in the sector. "To address the skills gap and meet market demands, we've introduced new generation technology that enhances unitary power and initiated an Internship Programme to build a pipeline of future technicians. We are committed to ongoing dialogue and collaboration with key stakeholders to further skills development within the industry," stated Zelrese Brair, Head of People and Culture at NESA.

To ensure the successful implementation of these projects, Nordex's local construction operations team has undergone comprehensive training in Spain on the company's latest wind turbine technology platform.

This preparation is essential for meeting the anticipated growth of South Africa's wind sector and underscores Nordex's commitment to providing robust construction expertise and support for the country's renewable energy ambitions. ⊙

Nordex Energy South Africa. (NESA), boasts a total installed capacity of more than 1 GW, making it the market leader with 32% market share on the total installed wind capacity in South Africa. By Q1 2022 NESA had built and operated (O&M) nine wind farms (1.1 GW) in the country, under the REIPPP Programme. The Nordex Group focuses on development, manufacturing, project management and servicing of onshore wind turbines and this has been the core competence and passion of the Nordex Group and its more than 10 000 employees worldwide for 35 years. With the acquisition of Acciona Windpower in 2016, the Nordex Group has become a global player and one of the world's largest wind turbine manufacturers.

## New milestone in industrial **WASTE MANAGEMENT**

Mpact Waste Management, the on-site waste management arm of Mpact (the leading paper and plastics packaging and recycling business in Africa), has announced that it is now providing sustainable solutions for the management of waste products to other divisions within the Mpact Group.

Hese partnerships are already in progress with Versapak in two provinces – Roodekop, Gauteng, and Paarl, Western Cape," says Marinus van Vollenhoven, National Manager at Mpact Waste Management. "This collaboration is a natural evolution for us, as we are extending our proven expertise in waste management to ensure the entire Mpact Group operates as efficiently and sustainably as possible."

With Mpact Waste Management's experience and wellearned reputation for innovating customised, sustainable solutions, it made perfect sense to apply their expertise to benefit Mpact's other divisions. Mpact Plastics and Versapak had their own specific needs and Mpact Waste Management's on-site understanding of waste patterns allowed them to apply the best, unique, sustainable solutions accordingly.

Mpact Waste Management has essentially taken over the entire waste management process on site for Mpact Plastics. Specific initiatives include:

- A demarcated waste area
- Installation of a baler for recyclables like PET and other plastic
- Directing and co-ordinating the movement of "scrap" material/wastage from production to other Mpact Divisions to make use of in their production process
- Currently on between an 85% and 95% recovery rate on recyclables
- Provision of a comprehensive, site-specific Health and Safety File that is tailored to Mpact Plastics' organisational scope and meets both legislative requirements such as those set out in the Occupational Health & Safety Act, applicable regulations, as well as client-specific requirements.

Mpact Waste Management innovated a different solution for Versapak where keeping costs under control was a key focus. The coordinated approach to waste collection and product delivery has significantly improved operational efficiencies. Measures include:

- A reduction in the number of lifts on general waste to cut costs; the use of a baler to bale general waste/packaging material will see a drastic decrease in the number of upliftments
- A better rebate rates on recyclables
- Placement of waste-handling equipment like bag stands, skips, and a cage for K4
- Onboarding of multiple service providers to facilitate effective recycling

The results of these progressive collaborations are ongoing waste processing efficiencies and streamlined operations. They are also demonstrating that on-the-ground knowledge and immersion in a client's distinct needs enable customised solutions that result in lower costs.

Planning, innovative thinking, reliable equipment, and smart use of available space combine to maximum effect.



With sustainability at the very heart of the waste solutions, responsible material management and recycling are a given as are health and safety compliance.

Mpact Waste Management's collaboration with Mpact Plastics and Versapak is another giant step on the road to a true circular economy through economically viable and environmentally sustainable solutions.

The same specialised skills and innovative customisation are available to prospective clients needing solutions and costefficiencies for the management of waste products. 

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### **ABOUT MPACT WASTE MANAGEMENT**

Mpact Waste Management's experts are a dynamic, skilled team with over 30 years of industry experience. The team operates at over 400 sites nationally, creating waste management solutions for businesses of all sizes.

Under the Mpact name, Mpact Waste Management is committed to smarter, sustainable environmental solutions that drive companies forward responsibly. Through its partnership with Mpact Recycling, it offers its customers efficient on-site waste management solutions and succeeds in converting waste into profit.

Mpact Waste Management serves the following industries: printing, packaging manufacturers, FMCG, retail, commercial, manufacturing, and logistics and distribution.



## Global green building alliance SET TO BRIDGE ESG GAPS

In a pioneering move, the world's leading green building certification bodies – UK-based Building Research Establishment (BRE), the U.S. Green Building Council (USGBC), and the Green Building Council of Australia (GBCA) – have formed an alliance to create global cohesion in green building standards. This landmark effort bridges the gap between green buildings and the ESG (environmental, social, governance) reporting requirements of the finance sector, unlocking sustainable finance at a global scale.

The Green Building Council of South Africa (GBCSA) works in partnership with GBCA, which means that the alliance will have a positive impact on sustainable finance and the built environment in South Africa too.

Green building verification and certification schemes play a critical role in supporting ESG reporting. Together, the alliance's three rating systems – namely Green Star1, BREEAM2, and LEED3 – help many thousands of buildings and projects push to achieve net zero, ESG, and sustainable development goals (SDGs) worldwide. By aligning these systems, investors and stakeholders can have confidence that green buildings seamlessly fit into their ESG reporting processes, reducing climate risks, and driving impactful change.

"The Green Building Council of Australia was established in 2002 with the support of BRE and USGBC, so there has always been a long-term global partnership," explains GBCA CEO, Davina Rooney. "Finance is a global language and it's important that we join the dots to direct more finance to this critically important area."

GBCA chief impact officer, Jorge Chapa, adds: "Having been at GBCA for 17 years, I have the benefit of history with each of these organisations. This development does what all of us have wanted to do – advocate for green buildings in a collaborative and aligned manner. It is an exciting proposition that we hope leads to multiple other alignment opportunities."

The alliance is formed against the backdrop of the global climate crisis. The United Nations' Global Stocktake report last year sounded the alarm, indicating that the world is not on track to meet the goals of the 2015 Paris Agreement. Even if all countries fulfill their current commitments, the UN predicts a rise in global temperatures of 2.5 to 2.9 degrees Celsius above pre-industrial levels by the end of the century, exceeding the safe limits established by scientists.

One of the key aims of the alliance is to establish an internationally assured definition of a green building, addressing the challenge of inconsistent green building definitions and the risk of 'greenwashing.' Currently, the three existing globally recognised tools share common frameworks and objectives but, for those that are not green building

experts, their alignment and commonality is not clear.

GBCSA CEO, Lisa Reynolds explains: "The three organisations of the alliance have already put in all the groundwork to create robust, reliable green building certification tools, so it makes sense that we work together and take the lead in guiding the industry. It's about collaboration, not competition."

Reynolds adds, "This alliance will enable a positive impact on sustainable finance globally, and at scale. In any country, if a building is rated with one of these tools, investors and stakeholders can have confidence in what this means for their ESG, and also know that risk is lowered."

GBCSA, Head of Technical, Georgina Smit, adds: "With GBCSA set to launch the new Green Star Transforming Tomorrow Version 2 Tool this year, we want the property and finance sectors to know that we have listened to the market. Our V2 tool will connect more easily into ESG reporting, meaning that it will directly support reporting needs as opposed to adding more work. This tool is credible, relevant, and more streamlined than its predecessor."

The first milestone for the global green alliance will be educating the industry with the creation of a practical guide to explore the sustainable finance instruments currently available to the real estate market, such as green loans and green bonds.

The new guide will build on an initial document developed by GBCA and launched to the Australian market in 2023. The upcoming version is set to drive awareness of sustainable finance mechanisms among the real estate sector and demonstrate how rating systems like BREEAM, Green Star and LEED ensure compliance with ESG frameworks. It will be published at London Climate Action Week in June 2024.

Lisa Reynolds concludes: "We are so proud to be part of this new groundbreaking alliance, and we're excited to see how our Green Star certifications can contribute to transforming the South African built environment into a sustainable and thriving place for generations to come. I like to think of this alliance as a magic flywheel. We have three forces coming together creating momentum and the positive impact is multiplied many times over."  $\Theta$ 



## MT-X RANGE

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