



2019

# WESTERN CAPE

Produced by SANRAL



The Western Cape is a province of cities, dorpiess, farms, mountains, oceans and valleys. SANRAL's projects are all aimed at making these accessible through bridges, walkways and an upgraded network of national roads.



# Message from the CEO



## SKHUMBUZO MACOZOMA

The past year in the Western Cape has been most eventful. It is indeed a province of movers and shakers.

At the start of this year the Technical Innovation Hub (TIH), which is driven from the Western Region offices, was unveiled to industry stakeholders. This created a platform for graduate engineers to showcase some of the innovation-focused pilot projects that are in the development phase at the TIH. The projects they are currently piloting include the use of a robotic flagger at road construction sites, intelligent road studs to provide additional guidance to the road user and the planned use of 3D road markings, among others.

From futuristic innovation, to current day challenges, SANRAL remains integrally connected to industry role players on the ground. A series of stakeholder engagements are underway to ensure we keep the cogs of the road construction industry turning, as we are acutely aware of the critical economic development role our industry plays in the growth of our country's economy.

The feedback from these stakeholder engagement sessions was clear: the need for black SMMEs to be developed and capacitated to grow and prosper, so that they in turn can pave the way for large-scale job creation and poverty relief in our

country – a commitment SANRAL will continue to uphold.

The imminent upgrade of the Huguenot Tunnel is a major project on our radar, and while works have been slightly postponed from the initial projections of September 2019, the project is likely to commence in early 2020.

The top ten engineering projects in this region varied between the massive R760m upgrading of the N7 to the R75m improvement of three intersections on the N14. In all of these opportunities were created - and taken - for SMMEs, employment and training. This in line with our commitment to build roads AND communities.

We reiterate our appeal to the industry to prioritise compliance. At the end of the day we disburse tax payers' money and we have an ethical and legislative obligation to do so in a responsible and transparent manner. We remain focused on our 14-point plan that we use to guide how the various projects are executed across the province and we are confident that the projects we have in the pipeline will add great value to the lives of the people of the Western Cape.

After all, roads are first and foremost, built for people, then vehicles.

*Skhumbuzo Macozoma is SANRAL's CEO*

# Message from the Regional Manager

## RANDALL CABLE

The Western Cape Government (WCG), City of Cape Town (CoCT) and SANRAL, have enjoyed cooperative relations across various projects in this province. We share a common vision for safer roads not only for motorists, but in particular for pedestrians, who are our most vulnerable road users. Furthermore, we take collective responsibility for strategic road infrastructure development across the Western Cape.

The Transport Management Centre in Goodwood is a sterling example of an initiative that is jointly funded by SANRAL, WCG and CoCT. With a Freeway Management System that monitors the major freeways across the city, our collective resources enable us to despatch the most appropriate emergency assistance directly to the scene of the incident.

SANRAL has made massive strides on the upgrade of the N7 freeway over the last years.

We are also equally passionate about paving the way for our youth to seize developmental opportunities within the engineering sector. This year scholarships were awarded to 220 learners,

64.09% of whom are female. Of the 151 SANRAL bursary holders across the country, the Western Cape has 31 engineers in the making.

The WCG also has an annual intake of engineering graduates into their Professional Development Programme (PDP, who receive practical experience including training, mentoring, support, on-the-job-exposure and professional supervision to be registered as professionals with the Engineering Council of South Africa (ECSA). SANRAL has a similar Professional Development Programme confirming our commitment to invest in our most valuable asset, our people.

SANRAL is committed to working with the WCG and CoCT in our quest to develop, maintain and improve road infrastructure across the province and as far as possible use our collective resources to benefit the people of the Western Cape with job creation, skills development and large-scale economic development of the road construction industry.

*Randall Cable is the regional manager for SANRAL's Western Region*



**ERRATUM:** In our last edition of Hello Western Cape on pg 7, the lead story on the Huguenot tunnel listed the tunnel's length as 3917km. The tunnel is, in fact, 3917m long. Our apologies for the misprint. – Ed

# Gordon's Bay/Houwhoek road gets asphalt face-lift

The N2 remains one of the most scenic routes in the Western Cape, if not the whole of South Africa. With a significant portion dubbed the Garden Route, this national road carries a great deal of traffic, both commercial and recreational, particularly between the Western and Eastern Cape. Along the way is breathtaking natural flora that simply compels one to make several stops.

To ensure a superior road user experience, this project, which from May 2018 until July 2019 saw nearly R10m spent on labour costs, involves an asphalt overlay between Gordon's Bay Intersection and Houwhoek Pass.

"We are acutely aware of the importance of our projects in developing the road construction industry, particularly to see black-owned SMMEs come through the ranks. To this end we have already exceeded our 20% target, with 26% of the contract value being allocated to black sub-contractors," says Tiago Massingue, SANRAL Project Manager.

Glad Africa is the consultant on this R141m project, with Haw & Inglis as the main contractor, and no less than 18 sub-contractors who directly benefit from work packages and training. Not only is there a huge focus on safety training, but also specific skills such as gabion work and flag-person training.

"The project is progressing well, with the asphalt overlay to the Sir Lowry's Pass section nearly 100% complete and approximately 60% complete for the rest of the road. We have made a concerted effort to minimise inconvenience to the public, with much of the road closure happening at night. Where we have had stop/go points during the day, the stops have been limited to under 15 minutes. We anticipate that the work will be completed by the time you read this publication," continued Massingue.

SANRAL is mandated to not only develop the national road network, but also to maintain it, and more



importantly, to ensure that this maintenance is done timeously in order to save costs. Delaying critical maintenance by three to five years, makes it six times more expensive to fix the road, and delaying it by five to eight years, sees that figure exponentially increase to 18 times more.

These sobering figures make one think twice before complaining about the inconvenience of road works when it seems to the untrained eye that the road is not in need of repairs. It would appear that a stitch in time indeed saves nine.

## The nuts and bolts of the Hopefield Interchange

As Cape Town's West Coast community grows the N7 has to keep up with the expansion, and as a result the Hopefield Interchange was designed to link the R45 to the new N7, with a particular focus on safer access and increased capacity of the road.

The project involved the construction of approximately 5km of dual road on the N7, 2km of ramps at the new interchange, three separate bridges and an agricultural underpass.

Speaking to the resident engineer from Royal HaskoningDHV, Leon Oosthuizen, the magnitude of the construction process impressed. Standing on the ground, humans appear almost insignificant in stature, when compared to the towers of strength that are the mechanically stabilised earth walls, which carry the perched abutments for the three bridges.

The first year and a bit was likened to opencast mining, where a staggering 350 000m<sup>3</sup> of clay soil had to be removed to accommodate the roads underneath the bridges, and according to Oosthuizen, the biggest challenge was where to spoil the cut.

Another major construction challenge has been the quality of the materials. The area is rich in decomposed granite, and granite, when it decomposes, largely turns to clay. This meant sometimes sourcing fill material from over 30km away, to ensure the best quality fill was used.



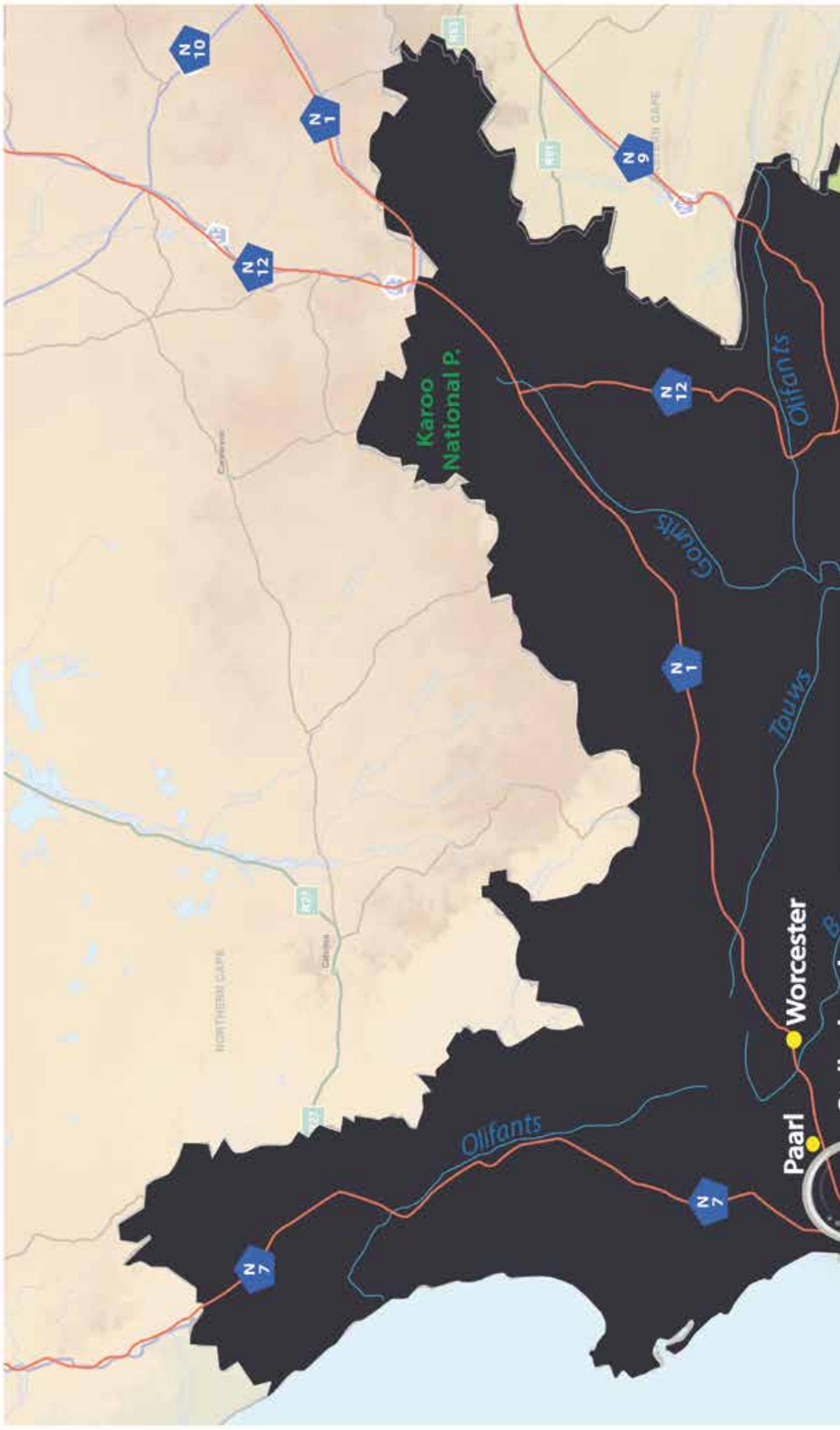
"While we pride ourselves on the economic and developmental opportunities that our projects extend to the communities along the national road network, we don't often shine the spotlight on the engineering

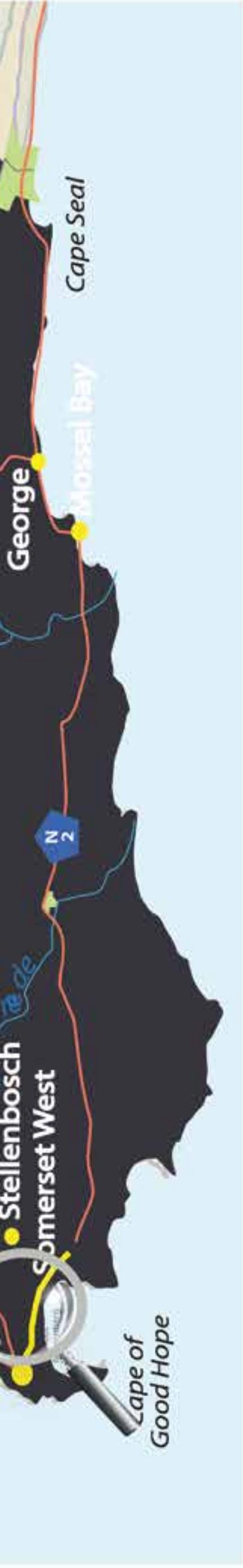


excellence that paves the way for these projects to come to fruition.

"Both our consulting engineers (Royal HaskoningDHV) and our main contractor (Triamic Construction) have played a pivotal role in how SANRAL contributes to the ongoing development of South Africa's knowledge economy. The skills transfer, knowledge sharing and innovation that have been instrumental in this project have capacitated hundreds of local residents with key tools with which to tackle the next journey," said Randall Cable, SANRAL Western Region Manager.

# N2 from Gordon's Bay to Houwwhoek





Project  
start

May  
2018

Total  
value

R141.5m

For  
SMMEs

R37.2m

Project  
end

September  
2019



**transport**

Department:  
Transport  
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# Highest honour for Olifants River Bridge

The Olifants River Bridge on the N7, one of SANRAL's flagship Western Cape projects, walked off with this year's highly acclaimed Fulton Award for excellence in concrete construction. At the helm of this project is Elma Lourens, a highly respected, and now also award-winning, project manager. With her sharp eye for detailed design, Elma has led the team through some significant challenges in order to complete this project with such impressive results.

"The award acknowledges the quality of SANRAL's design and engineering capabilities. It also underlines its ability to work with contractors, clients, suppliers and labour to deliver world-class projects. We are incredibly proud of Elma and her team," explained Vusi Mona, SANRAL spokesperson.

The design contract was awarded to Aurecon in 2013, with contractor Stefanutti Stocks coming on site in November 2015.

Hennie Niehaus, Project Director from Aurecon, reflects with pride on the work done over the past five years, resulting in a majestic structure over the Olifants River. The bridge comprises 11 spans, in the order of 14 metres, with the centre spans being built on a massive arch, spanning 96 metres.

"It was not without challenges, and we had to think out of the box to ensure that the foundations were strong enough to withstand the severe weight loads coming down onto the arch as a result of heavy traffic volumes," said Niehaus.

The bridge is part of the upgrading of the N7 from Cape Town to the Namibian border - one of the important trade and tourist routes in the country. It consists of the construction of a new road and bridge across the river adjacent to the present bridge which was deemed to be unsafe and incapable of handling large volumes of traffic.

The Fulton Award judges noted the attention to detail

in design and construction and the quality of the concrete finish which make the bridge "a testament to excellence in the use of concrete".

It is the highest honour bestowed by the Concrete Society of Southern Africa and celebrates excellence and outstanding achievements in concrete engineering and architecture, attracting more than 30 entries annually in several categories.

With a project cost of R161m, and R60m of that being spent on SMME development, this project has impacted tremendously on the local economy. "In line with our transformation policy, of the R13m that has been spent on the wage bill for this project, R3m was exclusively spent on women. We are incredibly supportive of the women who have embraced these opportunities and are contributing to a more representative road construction industry," concluded Lourens, who is indeed paving the way for women to excel in construction.



## George community now safer

The recently completed George pedestrian bridge towering over the N2 is best admired not for its aesthetics, but rather its ability to save lives. Site Agent Charlton Klazen of Civils 2000 explains how the project was rolled out. "This was a twelve month contract that kicked off in February 2018. The first three months were spent liaising with the various role-players in the community, including the municipality, to ensure we extend economic development opportunities to as many of the local residents as possible, including local labour and sub-contractors.

"With this important groundwork done, the actual construction took nine months and the bridge was completed in February 2019."

A project of this magnitude also creates a platform for skills development and knowledge sharing. Many of the sub-contractors who were involved in the construction have left with new and improved skills that will enable them to pursue further road construction opportunities.

While many George residents are very happy with this alternative for safe pedestrian passage over the N2, none more so than the principal of Parkdene Senior Secondary School, Rodney Cupido.

"Of the 1500 learners enrolled at our school, approximately 800 are from Thembaletu and make use of this bridge on a daily basis to get to school

and back home. I have often dreaded that call about a learner who may have been hit by a car while crossing the N2. Now that our kids have a safer alternative, the teachers, parents and I have peace of mind."

The learners were only too happy to add their two cents, with sleeping a bit later in the morning topping the comments of appreciation for this new bridge.

"Even though one still sees isolated incidents of people risking their lives to cross freeways and dodge cars, the vast majority of people appreciate the value of pedestrian bridges and use them," said SANRAL Western Region Manager, Randall Cable.

# N7 upgrade helps youth grow



Some of the 34 trainees who earned NQF3 and 4 certificates with the help of SANRAL and its construction partners.

The upgrade of the N7 freeway that links the Western Cape to the Northern Cape and Namibia has had a massive impact on infrastructure development, moving people and goods, from the individual road user to the road freight industry. If it were only about asphalt and bitumen and creating a better road user experience, one could say “mission accomplished”.

However, SANRAL has always believed in creating legacies of empowerment that continue to live on long after the graders and trucks have left the scene.

SANRAL, along with its construction partners, Aecom, Stefanutti Stocks and Power Construction, ERO Engineers, Triamic Construction and Royal HaskoningDHV, have invested in a youth learnership programme at a cost of R6.4m.

In total, 34 learners completed NQF3 level training, with 12 pushing on to supervisory level and successfully tackled NQF Level 4. While some have opted to pursue other employment opportunities, several learners are still active on the various sites and will no doubt make the most of every future opportunity that comes their way.

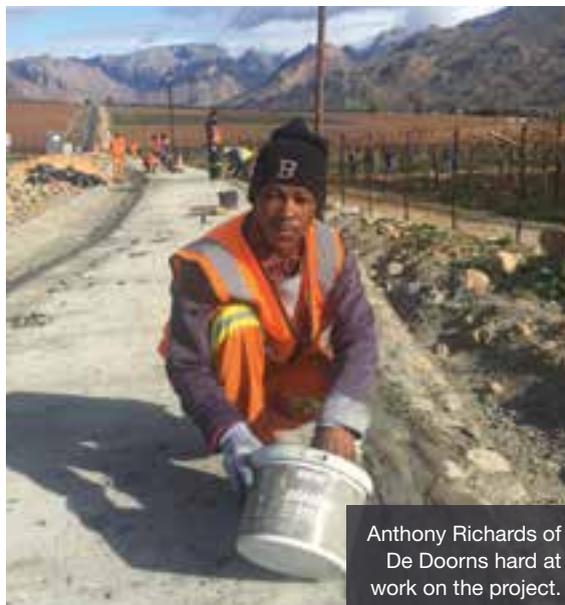
“I am certain that this is the industry for me. I look after construction signage and information boards for the road users. I have also worked on the laying of sub-soil pipes and trimming on site. I have learnt and grown tremendously and I want to encourage other young women to explore careers in the road construction industry,” said a very excited Simoné.

“We have seen a huge increase in the number of women actively pursuing careers in road construction, and are delighted to be able to create developmental opportunities that will enable our learners to access further opportunities once our projects are complete,” said Steph Bredenhann, SANRAL project manager.

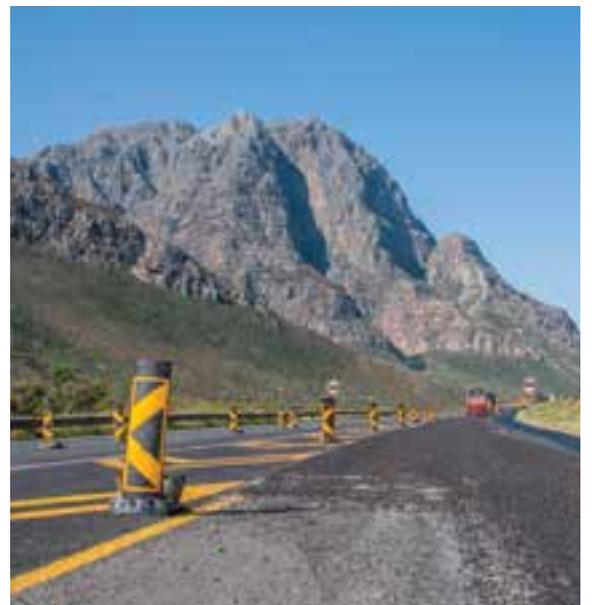
Barely a year into her training, Simoné Louw from Atlantis was already a team leader, able to command the respect and support of her peers, while taking in as much new information as her brain could muster.

As new projects are rolled out across the province, SANRAL will continue to spearhead developmental opportunities for South Africans, and particularly youth, to benefit and prosper.

## De Doorns project life-changing



Anthony Richards of De Doorns hard at work on the project.



Unemployment is a huge concern in South Africa today and SANRAL is acutely aware of the critical role the road construction industry plays in the economic liberation of South Africa’s most vulnerable communities.

Since *Hello Western Cape* reported on the work packages for pedestrian facilities in De Doorns in 2018, the number of packages for SMMEs has increased exponentially in 2019, from 10 to 35, with 13 SMMEs doing fencing, guard rails, stone pitching, landscaping, gabions, concrete and formwork, among others.

“When travelling between Worcester and De Doorns, the N1 is a hub of economic activity with scores of local men and women lining the road, busy creating aesthetically pleasing walkways to service the many

workers and scholars who travel alongside the N1 on foot every day,” said Randall Cable, SANRAL Western Region Manager.

The walkway covers a total of 14.5 km, which significantly increases the safety of pedestrians along this route. Furthermore, not only do these projects support SANRAL’s vision of empowering black-owned businesses to grow and prosper, but has a major knock-on effect on the work opportunities created for local labour.

The skills transfer and training that is given to unskilled individuals means that they can tackle the next opportunity with dignity, increased abilities and valuable experience, which may seem like a drop in the ocean, but to a few hundred families in the Hex River Valley, this R63m project is life-changing.

# Frequently Asked Questions

## WHO IS SANRAL AND WHAT IS ITS RESPONSIBILITY?

The South African National Roads Agency SOC Ltd (SANRAL) was established in April 1998 by an Act of Parliament as an independent statutory company, with the Minister of Transport as the sole shareholder. This year the roads agency celebrates its 21st anniversary and remains committed to its mandate to finance, improve, manage and maintain South Africa's expanding national road network of 22 214km.

## HOW DOES TRANSPORT IMPACT THE AVERAGE SOUTH AFRICAN HOUSEHOLD?

Nearly 94% of all daily trips are road-based transport modes. This is made up of subsidised buses (11.42%), private vehicles (40%) and non-subsidised minibus taxis (42.87%). These minibus taxis account for more than 70% of all public transport trips. In the average household, for every R6 that is spent, R1 goes toward transport costs.

## WHY IS THE HUGUENOT TUNNEL BEING UPGRADED AND WHEN WILL THESE UPGRADES BE DONE?

Following extensive research and planning, SANRAL has put together an operations plan for the much needed upgrades to the Huguenot Tunnel. After 31 years of continuous and safe operation, the electrical and mechanical systems have neared their end of life, and are in need of replacement to ensure compliance to international safety standards. The off-peak maintenance closures are scheduled for the first half of 2020.

## WHAT ARE THE ALTERNATIVE ROUTES TO BE USED WHEN THE HUGUENOT TUNNEL IS CLOSED?

Alternative routes include Paarl-DuToit's Kloof Pass-Worcester (±62 km), Paarl-Gouda-Tulbagh-Worcester (±121 km) or Wellington-Tulbagh-Ceres (± 74 km.) Depending on origin and destination, the N2 Grabouw to Villiersdorp (41 km) is also an option.

## IS SANRAL COMMITTED TO THE GREEN ECONOMY?

Yes! SANRAL's Western Cape building was awarded the 4 Star Green Star SA rating for eco-friendly office design. The agency is always exploring ways to reduce its carbon footprint, so when severe water restrictions became par for the course, the building was quickly adapted to ensure that the team saved every possible drop. Despite relief of water restrictions, SANRAL continues to employ water saving mechanisms that include the toilets being connected to rainwater tanks, the use of recycled, treated effluent water, which is obtained from a local sewerage plant and the use of waterless hand sanitiser instead of soap and water. Furthermore, an environmental task team is constantly

engaging and exploring environmentally sound and sustainable options for road construction and the impact of carbon tax for the road construction industry.

## HOW DOES THE LENGTH OF SOUTH AFRICA'S ROAD NETWORK COMPARE TO THE REST OF THE WORLD?

South Africa has the 10th longest total road network in the world, measuring a staggering 746 978km.

## WHICH ROADS IN THE WESTERN CAPE FALL UNDER SANRAL'S JURISDICTION?

- N7 from Melkbosstrand go the Namibian border
- N1 from Winelands
- N2 from Swartklip
- R300

## DOES SANRAL OFFER BURSARIES AND SCHOLARSHIPS?

Yes! SANRAL continues to support skills development in engineering and the built environment in the form of bursaries and scholarships. Application forms can be found on the SANRAL website, [www.nra.co.za](http://www.nra.co.za) or email [info@nra.co.za](mailto:info@nra.co.za) for more information.

External bursaries are aimed at students studying towards a qualification in Civil Engineering. Because of our core function and as custodians of the national road network, the current focus is on BSc,

BEng and BEng Techs in undergraduate degrees. SANRAL also sponsors postgraduate studies in civil engineering.

## WHAT ARE THE REQUIREMENTS FOR A SANRAL SCHOLARSHIP AND WHAT DOES IT COVER?

A learner needs to achieve 65-75% and above in mathematics, 65-75% and above in physics, 65% in English and an overall average of 75%. The reason we keep the standard so high is so that the learner also meets the entry requirements for most tertiary institutions. The scholarship includes school fees, textbooks and stationery, uniforms and sport attire.

## WHERE ARE SANRAL TENDERS ADVERTISED?

All first-tier tenders can be found in the following publications: Government Printing Works Tender Bulletin: [www.gpwonline.org.co.za](http://www.gpwonline.org.co.za)  
E-Tender portal – National Treasury: [www.etender.gov.za](http://www.etender.gov.za)  
Daily tenders - Lead2business: [www.l2b.co.za](http://www.l2b.co.za)  
SANRAL website: [www.sanral.co.za](http://www.sanral.co.za)  
SAFCEC: [www.safcec.org.za](http://www.safcec.org.za)  
CIDB: [www.cidb.org.za](http://www.cidb.org.za)  
Sub-contracting tenders are advertised in the specific local and regional newspapers, linked to the areas in which the services will be rendered.