



The road to the future ...

**Much
Asphalt**

Autumn 2009

SurfaceTalk

This is the single biggest asphalt supply contract ever awarded to Much Asphalt. Our customer is using two pavers, keeping our Eerste River production team on its toes. See page 3

Cape Town's R300:
220 000 tonnes in
14 months



A Murray & Roberts company

There is a lot to be thankful for



Much Asphalt managing director Phillip Hechter.

It is easy to sink into despondency with all the negativity around us – the global economic crisis, crime, the Zimbabwean situation, global warming, the list goes on. These issues affect us all.

However, we need to combine a positive attitude and original solutions to ensure the sustainability of our industry and our country through this difficult period.

We at Much Asphalt have much to be thankful for. We still have a strong order book going forward and are investing in additional capacity, which means that we are bucking the trend by employing more people. Appropriate skills are still difficult to find, so we are training and mentoring our people to ensure they can deliver the standard our clients expect.

Our challenge is to add continual value to our clients by delivering projects on time, to specification and in a professional manner.

Much Asphalt has a committed team that works hard to maintain a brand representing integrity, technical excellence, good governance and respect for the environment in which we live and work.

Many businesses take stock and reassess their priorities when economic times change, emerging stronger than before. We are determined to add value to all our clients and to the industry through operational excellence and world class customer service. Through innovation we will solve your problems more effectively and help you to achieve your objectives more easily.

- Phillip Hechter

Asphalt conference confirms we are world class

Much Asphalt managing director Phillip Hechter and KZN branch manager Timothy Gradwell attended the 2009 World of Asphalt Conference in Orlando, Florida, from 9 to 12 March.

This annual event is the asphalt industry's leading exposition and education resource and this year attracted 5 800 delegates, including 400 exhibitors.

The theme, "Sustainability, Design and Construction", focused on the sustainable aspects of asphalt pavements including recycling, warm mix asphalt, porous pavements and long life pavements. The conference also covered issues relating to intelligent compaction, quality assurance, designing mixes using the Bailey method, thin lift overlays and mix type selection.

"We have returned with a global view of new trends and innovations in all aspects of the

business from source materials to plant and production efficiencies," says Phillip. "The conference also allowed us to benchmark our operations against others around the globe and we can proudly report that the technology we offer compares favourably with the best."

Warm mix asphalt in particular is taking the world by storm, with clear proof of reduced emissions and energy consumption. It is estimated that within three to five years, 50- to 60% of asphalt in the USA will be manufactured by the warm mix method.

This gives credence to Much Asphalt's decision some 18 months ago to purchase a new 250 tonne/hour asphalt plant with a warm mix facility. Evidence again that Much Asphalt is ahead of the pack in introducing innovative and sustainable practices into South Africa.



The exhibition area at the 2009 World of Asphalt Conference in the USA.

A brand new DVD all about Much Asphalt is now available. The DVD covers who we are and how we do business; our products and services; projects in which we are and have been involved; the importance of SHEQ in our business; and career opportunities with Much Asphalt. Please contact the Much Asphalt regional manager closest to you if you would like a copy of the DVD.

Working around the clock in the Western Cape

The R300 is on schedule with 50 000 tonnes of a total 220 000 tonnes delivered by the end of April 2009.

While contracts on the N1 freeway and the R300 in Cape Town are keeping Much Asphalt's Eerste River and Contermans-kloof plants and laboratories open 24 hours a day, Western Cape regional manager Garth Miller stresses that other customers are not being forgotten in the current buoyant market.

An average of 1 200 tonnes of asphalt is being produced daily out of both plants, and quantities of up to 1 800t/day have been achieved during peak periods.

The R300 is on schedule, with 50 000t (40 000t BTB and 10 000t wearing course) of a total 220 000t delivered by the end of April 2009. JV partners Roadmac and Haw & Inglis are using two pavers for BTB and wearing course, necessitating the delivery of relatively large quantities of both products from Eerste River on a daily basis.

High profile projects

On our N1 contract from Koelenhof to the Huguenot Toll Plaza, Garth reports that about a quarter of the 120 000t requirement had been delivered by end March. The relatively high recycled asphalt (RA) content is not causing any quality issues and the asphalt produced to date has met with the full approval of the client and consultant.

Other high profile projects in progress in the Western Cape include the following:

- Road widening in Pniel at the foot of the Helshoogte Pass near Stellenbosch – shoulders are being paved with red coloured asphalt for safety reasons;
- The Koeberg interchange, a Power Construction & Group Five joint venture, requiring 30 000t of 37,5mm LAMBS (Large Aggregate Mix for Bases) and wearing course;
- Link road between the Cape Town Waterfront and Somerset Hospital for Martin & East;
- Hospital Bend at the N2/M5 junction, requiring 13 000t of which 3 000t of LAMBS and wearing course has already been delivered. The wearing course will be followed with 4 000t of UTFC (Ultra Thin Friction Course) over the entire surface to assist with the dispersion of water and absorb noise. This is a challenging project, with the contractor only able to pave a small area at a time;
- The N2 from Hazeldene to Broadlands in Somerset West (10 000t with 10% RA) for Brink & Heath;
- Broadlands to the foot of Sir Lowrys Pass (also 10 000t with 10% RA) for Power Construction;
- The N1 at the Huguenot Plaza, where Much Asphalt is supplying the UTFC from its Worcester plant. Much Asphalt was asked to submit its own mix design, which we have guaranteed for three years.

Coloured asphalt

There has been a lot of municipal work awarded in outlying areas such as Paarl, Wellington and Worcester and bus lanes for the rapid transit system are also in demand. Garth believes the use of coloured asphalt will soon become as popular in the Western Cape as it is in the Eastern Cape and KZN.



GFIP contracts get off to a good start

SANRAL's Gauteng Freeway Improvement Project (GFIP) is well under way and Much Asphalt has production in full swing for various packages awarded in Phase 1.

SANRAL awarded seven contracts valued at R11,5-billion for the first phase (125, 5km) of the GFIP. The total asphalt quantity required is estimated at 924 000 tonnes, of which Much Asphalt is supplying 806 000t.

Although rain hampered production severely in February and early March, we were able to supply the quantities required for this period. Our Benoni, Kempton Park, Eikenhof and Roodepoort plants have all started double shifts to supply the GFIP as well as the Johannesburg Development Agency (JDA) Bus Rapid Transit (BRT) projects. Most of the mix supplied to date

has been BTB and the overlay trial mixes of work packages A, E and I have been paved.

Nearing completion

The long mix design process of the bitumen rubber asphalt semi open graded (BRASO) overlay is nearing completion, with paving trials completed on work packages A and B. BRASO is the final surfacing on work packages A, B, C and E and was specified as a result of exceptional performance on previous SANRAL projects.

BRASO was first used in Gauteng back in 1986 on the Buccleuch interchange on the N3 freeway. It performed very well until 2003, when the interchange was once

again overlaid with BRASO. This was no mean feat as conventional asphalt under such traffic and load conditions is normally expected to have a life span of eight to ten years before requiring some maintenance intervention.

Our major concern in meeting the needs of the GFIP is sufficient raw material supply and we are continuously communicating with our suppliers to ensure availability of raw materials in the peak demand period ahead of us.

Our two new state-of-the-art twin drum premix plants, with a joint manufacturing capacity of 550 tonnes/hour, are awaiting environmental approval prior to commissioning in Benoni and Kempton Park. Our hot storage capacity has also been increased by 1 600t.

The GFIP Phase 1 packages

GFIP Work Package	Section	Contractor	Paving Contractor	Asphalt mix types required	Status of supply
A1 A2	N1-20 Golden Highway – 14th Avenue, N12-18 Diepkloof – Uncle Charlies	Siyavaya	Power & Group 5	BTB, Wearing Course & BRASO	Currently supplying BTB
B	N1-20 14th Avenue – Buccleuch	WBHO	Roadspan	BTB, AE-2 Wearing Course & BRASO	Currently supplying BTB
C	N1-20 & 21 Beccleuch – Brakfontein	GLMB	Rand Roads	BTB, Wearing Course & BRASO	Currently supplying AE-2 Mill & Inlay
E1 E2	N3-12 Dwars in die Weg – Geldenhuys, N12-18 Elands – Reading	Siyavaya	Power & Group Five	BTB, Wearing Course & BRASO	Currently supplying BTB
F	N3-12 Geldenhuys – Buccleuch	GLMB	Rand Roads / Roadspan	BTB & AE-2 Wearing Course	Currently supplying BTB
H	R21-1&2 Benoni – Olifantsfontein	Power	Roadspan	AE-2 Overlay, Temporary surfacing & UTFC	Currently supplying temporary surfacing
I	N12-19 Giloolies – Rietfontein	CMC / G4	Roadmac	BTB & AE-2 Wearing Course	Trial sections completed
R21	R21-1 Pomona – Benoni	Power	Power	AE-2 Overlay Temporary surfacing & UTFC	Currently supplying AE-2 Overlay

Inter-laboratory correlation testing ensures quality

The testing of raw materials (aggregates and bitumen) and finished product (asphalt) to ensure compliance with client specifications is an integral part of the quality management system at Much Asphalt.

All our plants have well equipped site laboratories incorporating the latest testing technologies available to the global industry.

To ensure that the testing carried out in our laboratories meets stringent quality standards, Much Asphalt employees are trained internally and at external institutions such as the Asphalt Academy and technical universities. A lot of experiential learning is also obtained from workshops and seminars held by the Society for Asphalt Technology (SAT).

Laboratory equipment is calibrated frequently as

stipulated in our internal laboratory quality manual.

Another check that has recently been put in place is inter-laboratory correlation testing. This is managed by our SANAS accredited Central Laboratory in Eerste River, Cape Town. The Central Laboratory prepares samples of asphalt

that are sent out to all our site laboratories for testing. All the test

results are then analysed by the manager of the Central Laboratory.

The site lab test results are compared to those of the Central Laboratory and given a correlation rating (A = Acceptable, B = Warning, C = Severe). Laboratories with test correlation ratings of "warning" and "severe" are investigated and problem areas are identified and corrected.

Correlation ratings ABC



To confirm that the problems have been resolved, the correlation testing with the relevant site is then repeated.

"The inter-laboratory correlation testing scheme is a very handy tool to identify and correct possible testing problems," says Much Asphalt technical director Herman Marais. "It is a privilege to have this system in place as there are not many commercial laboratories that can claim to be part of a correlation testing scheme where their test results are compared with 17 other laboratories."

A similar testing system has now been implemented by SANRAL in Gauteng.

Samples are sent to the 12 SANRAL GFIP site laboratories, Much Asphalt's Gauteng regional laboratory and its four Gauteng site laboratories, as well as the Gautrans central laboratory.

The system is managed by SANRAL's Riaan Oerlemans, who collates and analyses the test results. Two sets of correlations have been completed and there has already been a noticeable improvement in test results.

What do YOU think?



Thank you to Andrew Thompson, managing director of Zebra Bituminous Surfacing – a customer for 25 years – for contributing to Surface Talk.

I wonder if it is still common knowledge that the name MUCH originated from a partnership between Murray & Roberts and Clifford Harris 44 years ago?

This was before my time. However Zebra's association with Much Asphalt began in 1984 when we purchased a very small tracked paver in defiance of the "big guys" and their equally big prices and perceived complacency. Some competitors at the time regarded us with disdain and did not give us much of a chance of success.

We have always remained wary of the trappings of growth, comfortable market share, and attitude of "if it works, why fix

it?". To this end it is notable that not one of the competitors we challenged when starting up back then are in business today!

It is also very sobering to see how many new entrants have been drawn to the paving market in the last five to ten years. Now, more than ever, we hold onto the sporting saying "you are only as good as your last game", knowing that quality of service and value for money need to be our differentiating characteristics.

Much Asphalt has been able to skillfully maintain levels of service and sufficient urgency to survive countless market pressures over the past 44 years. For this we congratulate you.

Upgrading in Polokwane and Witbank

The Bloemfontein management team (from left): Karin Kriel, Thandi Mokgalagadi, Brunhilda Hetnschel and Lizette Khun.



From left: Rick Jackson, Much Asphalt Eerste Rivier branch manager, Sabita CEO Trevor Distin, and Dave Bullock of Unitrans, at the BitCert certificate presentation ceremony on 4 March in Cape Town.



Early this year the Southern Africa Bitumen Association (Sabita) announced that Much Asphalt's Eerste River plant in Cape Town had been certified compliant to the bitumen certification (BitCert) scheme for Health Safety and Environment by the Centre for Occupational Safety, Health and Environmental Conservation (COSHEC).

"Much Asphalt (Eerste River asphalt plant) and Unitrans Fuel & Chemicals (Milnerton transport depot) were the first two Sabita member sites to receive the thumbs up from our auditor and are the

first recipients of the coveted BitCert award," said Sabita CEO Trevor Distin.

"This achievement is a major milestone in the industry's efforts to become self-regulated in HSE matters pertaining to the handling of bituminous products."

In congratulating the Eerste River team on its achievement, Much Asphalt managing director Phillip Hechter challenged all the company's regional managers to achieve certification for at least one of their branches in 2009.

Late last year the Gauteng region of Much Asphalt was split into the Gauteng Inner and Gauteng Outer regions to improve client service and achieve better management control. The move came as a result of continued growth and bigger workloads all round.

Eddie Jansen van Vuuren was appointed regional manager for Gauteng Outer, which incorporates our plants in Limpopo, Mpumalanga and the Free State Province. Our operations in these regions have traditionally been established and managed by Gauteng due to relatively easy access and availability of resources in the business hub.

In July 2006 Much Asphalt established a plant in Polokwane, Limpopo, managed by William Nenjerama. The major project currently under way is for asphalt supply to Grinaker-LTA on the N1 between Kranskop Plaza and Polokwane. We are currently upgrading the facilities with new offices and more secure parking for trucks.

Our Mpumalanga plant opened in October 2007 on a temporary site in the Witbank industrial area of

Ferrobank. We are currently establishing a replacement plant on a new site that is more easily accessible from the N4, has water and electricity, and has permanent offices, workshops, lab and weighbridge office.

The new Witbank plant is being moved from Bloemfontein, where it was used for the supply of asphalt to the Bloemfontein Airport contract.

Mpumalanga branch manager Elias Moloi is currently studying part time at the Tswane University of Technology in Pretoria towards his BTech Mechanical Engineering.

Following the successful completion of the Bloemfontein Airport contract, the plant is back to normal production. The Bloemfontein facility is entirely run by four women, led by branch manager Thandi Mokgalagadi.

"Our goal for the Gauteng Outer region is to become self sufficient and we plan to ultimately run the region from the Witbank branch," says Eddie, who is currently based at Benoni. "We are also working towards getting our laboratories ISO 9000 quality approved by the end of the year."

Successful HSE Audits

The BitCert scheme was introduced in 2008 to encourage members to build on their existing HSE initiatives and to ensure compliance with the law. "It is our intention that all our member sites processing bituminous products should be audited on an annual basis by an independent auditor," Trevor Distin added. "We look forward to assisting our members to accomplish this goal as we continually strive to improve the health and safety of our workers and conserve the environment."



Paving of bitumen treated base course in progress on the N2 Mthatha to Nqadu Forest rehabilitation project in the Eastern Cape.

Overcoming challenges through innovation

The involvement of East Coast Asphalt in the rehabilitation of 25km of the N2 freeway from Mthatha eastward to Nqadu Forest in the Eastern Cape has required some innovative thinking to meet the client specs. It has also benefited the local community.

East Coast Asphalt is a company formed by Much Asphalt and Asphalt Services in East London with the aim of implementing a black empowered joint venture when an appropriate business partner is found.

Reconstruction

Haw & Inglis is the main contractor and UWP the consultant on the SANRAL contract. Work involves patching of the existing road (12 000t), reconstruction of two sections, strengthening of two further sections with a 60mm conventional bitumen treated base course overlay (34 000t), conventional wearing course joining into Mthatha

(6 000t), as well as an end-to-end overlay with 40mm of continuously graded bitumen rubber asphalt (34 000t).

Progress by the end of March 2009 included 100% of the section joining into Mthatha, 95% of the patching, 76% of the BTB layers as well as 8% of the bitumen rubber overlay.

Much Asphalt's mixing plant from Kokstad was established at Transkei Quarries to service the project. This has been substantially modified to produce all the required products at the desired production rates and to comply with environmental legislation. A system comprising a pre-collector, high speed wet scrubber and evaporator unit was installed.

This unit was designed to perform well below the legislated emission requirements, including a safety margin of 50%. A new Komatsu front end loader and a refurbished weighbridge completed the upgrade.

Patrick Valentyn was recently promoted to manage the fledgling Mthatha branch of East Coast Asphalt and is assisted by four local contract employees. The team on this project also includes Much Asphalt mobiles manager Francois van der Spuy together with other members of our mobiles operation, and employees from our East London and Coedmore, KZN, branches.

Purpose designed

Aggregates (dolerite) are supplied by Great Karoo Crushing and Transkei Quarries. Colamine is added to all mixes to ensure the desired adhesion of the binder to the aggregates. The bitumen rubber binder is manufactured locally by Tosas and added into the mixture by means of our purpose designed and built injection system.

"We have also been able to assist two local schools and a clinic with social responsibility projects," says Francois.

Long service in Mthatha



Fitter's assistant Johan Khumalo (right) recently received an award for 35 years of service with Much Asphalt from Mthatha branch manager Patrick Valentyn.



Patrick Valentyn (right) in turn received an award – for 20 years' service – from Francois van der Spuy, Much Asphalt mobiles manager.

HIV/Aids awareness campaign spurs staff into action

Raj Rajcoomar, QA/HSE manager at Much Asphalt, reports that an ongoing **Know your status** campaign has resulted in 90% of staff across the company undertaking voluntary HIV testing.

The awareness campaign also led staff to undertake various internal and community initiatives around World Aids Day on Monday 1 December. In Gauteng staff collected gifts for the 35 Aids orphans at the St Francis Care Centre and visited the children on World Aids Day to hand them out.

Staff of our Coedmore, KZN, branch delivered hampers to the Durban Child Welfare and spent the day establishing a vegetable garden for the organisation. At Eerste River a healthy breakfast for staff was followed by voluntary HIV testing.



We know our status – staff of Much Asphalt's Gauteng regional office wore **I know my status** tee-shirts to mark World Aids Day on 1 December. Pictured are (back from left): Herman Marais, Tom van Rijckevorsel, Phillip Nel and Vivien Seiderer; (front from left): Gloria Nkuna, Ria Bezuidenhout, Melanie Thomson and Nirasha Rajkumar.



Much Asphalt managing director Phillip Hechter gets his HIV test from Sister Oliver of Life Occupational Health Care at Eerste River.



Visit to the St Francis Care Centre in Johannesburg.



Preparing a vegetable garden for Child Welfare in Durban (back from left): Sipo Nyide, Kalay Govender, Danny Purusotham, Justice Ramagoma, Caranese Pillay and Raj Rajcoomar; (front from left): Danny Govender, Thokozani Dlamini and Joseph Gwala.



Employees of Much Asphalt Benoni (back from left): Thomas Thekiso, Chris Mogorosi, David Mogale, Ishmael Mpfuni, Khayalami Mahlangu, Vivien Seiderer (branch manager) and Lebohlang Molefe; (front from left): Graham Henry, Nathi Ngubane, Hendry Ngwana, Shielboy Malebati and Prince Tanzwani.

