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#### **PUBLISHER**

Nico Maritz E-mail: nico@eiapublishing.co.za 0113274062

#### **EDITOR**

Karyn Richards karynr@nowmedia.co.za 0113274062 SALES & MARKETING MANAGER Martin Fourie - Cell: 072 853 8405 E-mail: martin@eiapublishing.co.za

#### SALES EXECUTIVE

Frans Meyer - 0722673141 fransm@nowmedia.co.za

### PRODUCTION

Nicole Hermanson- 011 327 4062 E-mail: nicoleh@nowmedia.co.za

#### DESIGN

Christo Van Eeden E-mail: beyond@bdstudio.co.za

### JOHANNESBURG OFFICE

Tel: 011 327 4062, Fax: 011 327 4094,Now MediaCentre, 32 Fricker Road • Illovo • Johannesburg www.eiapublishing.co.za

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ON THE COVER

John Deere's new triplex mowers. See editorial on page 22. John Deere South Africa is acknowledged for sponsoring the front cover

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### A SALI STALWART

Debbie Shackleton recently left the employ of SALI after many years of dedicated service to the industry. She started working for SANA in 1994 and gradually took over the administration for the SALI/IPSA/LIA memberships, websites and awards.

uring her years with SAGIC, she says the industry became a lot more diverse and she saw how members had to adapt to the changing climate, as well as the widespread use of social media. In terms of her own job, she says she too had to learn to be "more technologically

She also saw a huge increase in the number of SALI entries for the awards, as well as the quality of the projects entered. "I remember when we only received 12 entries, and now we receive 150 of them, nationally. I've been fortunate to work with Prof. Piet Vosloo, Fourie Pieterse who sadly passed away a few years ago, and Morne Faulhammer, all national judges who have added great value to the awards. The Gauteng regional judges also give

tirelessly of their time, for which SALI is very grateful. One of the judges commented that SALI members are producing work at international standard level, a compliment indeed for South African landscapers."

Debbie says the most enjoyable aspects of her time with SALI were the conferences, trade fairs and especially the Bristle Cone trade days; also the 'amazing' people she has met and worked with, especially Val, Mary, Sylvia, Di, Eily, Andrew, Amy and all the members of SALI.

She leaves SALI in order to travel and spend time with her family.

All good wishes for the future Debbie, and thank you for your commitment to the industry - we will miss you!

### **NOTE TO READERS**

If you would like to receive Landscape SA magazine, please email me your company name, contact details and postal address on karynr@nowmedia.co.za

EDITŐR



Estates in Africa team at the 2019 SALI Year End Function



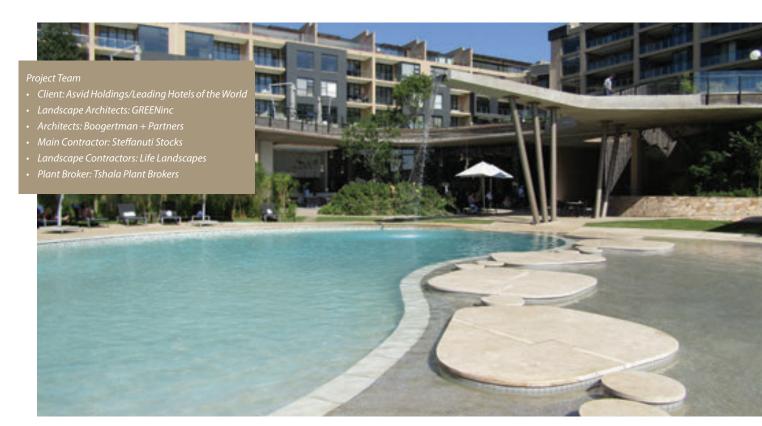
### THE HOUGHTON HOTEL

The Houghton Hotel in Johannesburg was completed in 2018 as the next phase of a long-term development adjacent to the Houghton Golf Course. It follows the completion of the Houghton apartments, right next to the hotel, the landscaping of which was featured in the June 2016 issue of Landscape SA.

andscape architect Andrew Kerrin, representing the team from GREENinc, says that the brief focused on the relationship with the adjacent golf course. "In some ways it was about connecting views across the course, whilst in others it was about looking inwards and creating private, sunken spaces. Many of the outdoor spaces also assist in breaking down the verticality of the building using terracing and vegetation, so that each space has a human scale," he explains.



The main entrance water feature establishes "the language of water", the central theme of the project



Water features take the form of channels, pools and waterfall shoots and spouts, all themed on the Highveld typology of a water thread moving through the landscaped areas

### **Design concept**

The design philosophy re-imagines a river concept due to the fact that an underground stream daylights onto the golf course. "We crafted the theme of a flowing river around this aspect of the site, the idea being that of a perennial stream cascading over cliffs to a river below," says Kerrin. The concept references the typology of the Highveld region with its waterfalls, pools, cascades and a mountain stream all creating the sense of a water thread through the landscaped areas, which comprise the following:

- · an upper terrace
- a raised adult pool
- a sunken garden with family pool, pergola and cocktail bar
- a sunken spa garden with pools, sauna, steam room and outdoor shower
- a conference break-out space with reflection pond
- natural stream connecting to the golf course.

The upper terrace consists of a raised restaurant space, separated from a cocktail deck below. Stone walls create a separation line between private unit gardens and public spaces and are prominent hardscaping features throughout. Planted earth mounds also create privacy, enclosed spaces and height screening.

On the upper terrace, a linear water element provides interest and helps to draw visitors deeper into the garden space. It also establishes a recurring theme, namely that all primary spaces are connected by water. In the gardens of the upper deck, the water origin is within the planting and water features take the form of channels, pools, and waterfall shoots and spouts. A large waterfall creates the illusion of a connection to the adjacent golf course and its wetland stream.

In the sunken garden, collection pools of water become gathering points for people. Whereas the upper terrace is characterised by low perennial planting, the sunken garden is nestled in deep forests, with tightly planted trees creating privacy and establishing a sense of place.

The main entrance to the hotel is understated, says Kerrin, but still creates a sense of arrival; the simple water feature introduces the "language of water", the major feature of the project.

The restaurant area on the first floor connects inside and outside spaces, extending the usable seating space. This is the south side of the building which is shady, and the forest-like effect "hugs" the building.



Well-established roadside planting



Plants need to be carefully controlled and maintained so that they remain in their designated places.

Stone walls create a separation line between private garden units and public spaces.

At the spa level, facilities have also been extended to the outdoors, where there are natural and treatment pools. The former links to the upper water feature. The main adult pool can be decked over if necessary, providing an option for further functional use of the space.

From the point of view of hard landscaping, Kerrin says the walkway finishes are of Artevia concrete, which keeps the overall feel light and organic. "The intention is to keep things raw and simple", he explains.

GREENinc's approach to the planting was for it to relate to the seasons and to textures. The upper landscape is a perennial mix of grasses, flowering in different seasons. Thistle-like plants provide texture to the landscape, especially as seed heads are retained. Planters along the slab edge bring variation to balconies and provide framed views. They contain material that will eventually cascade downwards over the slab, adding to the forest effect and softening the slab.

#### Landscape installation

This was carried out by Ida-Marie Strydom of Life Landscapes who, during an on-site visit, made the following points about their work:

- the landscaping is 100% indigenous;
- different leaf textures, shapes and colours further establish the idea of an urban forest, for which the City of Johannesburg is well known;
- drip irrigation has been used throughout the site;
- Life Landscapes was also responsible for the installation of water plants and

- a specific soil mix for the water features. They also added pebbles to them;
- a roof garden above the main reception contains rare plants which were specially grown for the project;
- the attention to detail required for the planting was 'finicky' and created a type of paint by numbers approach in terms of installation;
- with most of the planting taking place on a slab above parking garages, there needed to be careful planning and co-ordination between Life Landscapes and the main contractors;
- large quantities of lightweight soil were brought to the site by crane, and levels were extremely challenging;
- some of the plants used are vigorous growers and need to be controlled so that they remain in their

- designated places. The landscaping is high maintenance even though it is indigenous;
- at the main pool area, Phoenix reclinata palms were brought in through a tunnel under the slab using a spider crane;
- large rocks in this space have been used to retain a slope. Strydom says that placing the rocks was "very challenging";
- for the most part, containerised trees were used in preference to ex-open ground specimens as the risk is lower and the growth rate is better; and
- bamboo was used for screening and privacy, and an indigenous species was sourced from the Midlands in KZN.

Strydom says this project was "in a league of its own for plant choices, which were carefully researched by GREENinc. I'm really proud of what we accomplished on this site and the whole project was a huge learning curve."

### Challenges

Kerrin states that to begin with, the grid changes on site presented challenges, as did the fact that the site is tight and shady. Plants chosen needed to be able to deal with sun and shade.

"Our design approach is always to create spaces for people, and to look for beauty and opportunities already present on site. While spaces need to be simple in appearance and robust in their making, the challenge is always to allow for complexity and multifunctional usage. We also believe that good, simple spaces need to be detailed meticulously.

This project was all about giving the visitor an unexpected encounter with a Highveld landscape – its open grasslands, cool crisp streams and deep green forests – even in a confined space bordered by multi story buildings," he explains.



Plants need to be carefully controlled and maintained so that they remain in their designated places. Stone walls create a separation line between private garden units and public spaces.

### SOUTH AFRICA **ATTENDS IGCA 2019 CONGRESS**

The International Garden Centre Association (IGCA) holds an annual congress for independent garden centre owners annually around the world. In September it was the turn of the UK, which is well known and respected as a leader in the field of retailing in garden centres.

his year there were 234 delegates from 19 countries, which added to the mix of knowledge share as well as exposure to different ways of thinking. A SANA delegation attended the congress held in Windsor, which toured garden centres in the southern parts of England. The tour visited 11 garden centres and included some cultural and tourist attractions alongside the formalities of a congress.

### What we saw

The garden centres are very different to those in South Africa in that from outside, it looks like a garden centre but on entry it looks more like a traditional department store; gardening in most cases is relegated to the back. The departments that are large include home ware (particularly kitchen ware), home décor, clothing and books. Food courts and food departments account for almost half the trade in some stores and it is not uncommon to see restaurants with 400 plus seating.

In the garden department, indoor plants are still popular in the UK and the selection is wider, especially in the 14 to 20cm pot size range. The concept of indoor plant of the week was seen in most stores.

Given the UK climate, bulbs are popular and mostly sold loose. There are large bulb displays which are well supported with props and POS (point of sale) spots which defined the area. Dahlias are as popular as orchids here... they are already selling the idea for next summer and we saw showrooms of displays and cut arrangements, as well as one garden centre that had an open garden field raising funds for charity.

The traditional shrub and perennial departments are full of interesting plant material, many familiar to our horticulturalists on tour. Interestingly, the plants are generally smaller and in smaller containers than what we are used to in South Africa; however when they are larger, they are manicured and perfect specimens.

Hard landscaping is piled high, in volume as well as selection. Everything is off the floor and in most cases also supported by benching and POS supplied by the suppliers, from containers to pebbles, to garden decor.

#### What we learnt

Plants only account for 20 to 30% of turnover, which is in stark contrast to South Africa where plant material sits comfortably at 50 to 60 % of turnover. There are opportunities for us to broaden some of our product offerings and take away some of the seasonal pressure on our industry. Signage is not obtrusive in the garden centres but easy to find. From service to information boards and POP (point of purchase) boards, they are generally below eye level so one sees them easily when in a department, but they don't obscure or clutter up the view. Only lifestyle or colour themed banners stand out, adding to the overall professional impression.

Just as disposable perennials became fashionable over the past few years, the next trend is disposable shrubs. They are sold in smaller containers, the idea being that as one decorates the garden or patio, they will be used as green fillers in mixed containers. They can then be pull out when planting up the next look. "We saw loads of traditional shrubs sold in mixed six packs - a great way to reinvent this department that is shrinking fast in South African garden centres," explains Stewart.



Colour theme displa



Dahlia display arrangements

Colour themed displays were more the norm than the exception. Displays in shades of yellow, blue, red and everything in between tied hard landscaping to plant material, creating inspirational display gardens. This works two ways it highlights plants and decor but also creates easy, inspirational displays on the

#### Final thoughts

There was not a lot of innovation on show in the UK garden centres we saw. It was more of what we do, but in a different way. It is possibly more retail and general consumer-orientated than gardenerorientated; however the overall impression was most certainly professional, and for those retailers at heart, it certainly was a tour filled with inspiration.

The main objective of the SANA delegation's attendance was to launch the IGCA 2020 Congress which will be held in Johannesburg and Cape Town during October 2020. South Africa has hosted the congress twice, in 1996 and again in 2007, and it is a huge honour to be hosting for a

Information and photos supplied by Wayne Stewart, Eckards Garden Pavilion, Bedfordview, Gauteng.

www.igca2020.co.za

### MAGALIESBERG COUNTRY ESTATE

Text and photos supplied by Alfred Rapoo

Since May 2018, Alfred Rapoo has been employed fulltime at Magaliesberg Country Estate in Akasia, Pretoria. He is responsible for maintaining the estate's grounds and landscaping, and reports directly to the estate manager and Board of Directors. His work started with rehabilitation of the area as the estate was in a neglected condition.

n addition to landscape design, installation and upgrading, Rapoo's work also involves taking care of the garden fence parameters, cleaning of spaces around the estate's 600 housing units, minor road repairs, irrigation and quality control. The Board of Directors initially tasked him with restoring the long-neglected gardens and one of several problems that he faced was a lack of machinery, as existing machinery was in need of repair. In addition, the irrigation system was not functioning optimally and the garden layout was in need of attention - trees were hanging over the fence line and on walkways - and the client wanted to bring about an immediate improvement to the estate's overall appearance.

Rapoo explains: "There were empty gaps at the reception area and trees around the estate were struggling due to lack of water; they required composting and tree stakes for support, and to ensure further good growth. The landscaping was also full of weeds and lacked nutrients. The estate manager played an important role in motivating the purchase of a PTO shredder machine to ensure that shredded material is used as mulch to improve water retention and ensure healthy plants. We have installed an irrigation system with a water wise/water saving MP rotator, and the automatic system is now working at both the east and west entrances to the estate. The system has enabled large areas to be properly irrigated and we hope to be able to extend it to other phases



Entrance signage complemented by soft colour

of the development that were recently undertaken."

#### **Purchase of new machinery**

With most of the machinery and equipment not being usable when he commenced work, Rapoo proposed the purchase of a new shredder machine, boom spray, long pruner, hedge trimmer and chain saw in order to attain the desired results on site. In an annual summary to the Board of Directors for the period May 2018 – June 2019, he reported the following positive results:

 the cleaning of the fence line was successful and a TLB has cleared vegetation away from it, particularly for



Gabion baskets and Acacia xanthophloea give the estate a warm African feel

- security measures and fire prevention;
- the repair of a brush cutter and Honda mower has greatly assisted in ensuring that veldgrass is cut three metres from the road in order to meet the estate's requirements and for motorists to have a clear view. A Kudu mower was unable to handle the workload and a ride-on mower has proved to be a better option, getting the job done more quickly and with a better end result. This will save time and petrol;
- the shredder has done a good job with tree cutting and the mulch has been used to enhance the planting, which is looking much healthier;
- the hedge trimmer has served its purpose very well, ensuring that hedges at the entrance are even and healthy;
- the long pruner and pole pruner have ensured that trees on the fence line and around the estate are pruned to meet the horticultural and safety standards of the estate;
- the tractor slasher has effectively cleared veld grass around the fence line and servitude; and
- all small trees planted were well secured with poles and tree ties, and watering with a boom spray has yielded good results. Each small tree has a tree bowl which acts as a reservoir to ensure good growth.

#### Soft and hard landscape changes

Water wise plants have been selected, including varieties of Crassula sp,



This area planted with LM Berea lawn forms the heart of the estate's garden

Sanseveria, Tulbaghia violacea, Chlorophytum comosum, Hemerocallis. Agave, Euphorbia and Agapanthus africanus. Stolons of LM (Dactvloctenium australe) were planted using a verticutter machine, and the grass has now covered over 2500 m². All grass and plants are regarded as mother stock and Rapoo says that one of his tasks was to ask for and collect cuttings from around the site so that they could be propagated, either by splitting and dividing (in the case of Agapanthus and Tulbaghia) or by

cuttings (such as in the case of *Crassulas*). With regard to hard landscaping, the estate is situated on the edge of a mountain and Rapoo therefore put gabion design principles in place, using the numerous good rocks that were available nearby. He designed gabion walls around the entrance and proposed paving for school children, pedestrians and visitors. The estate is currently working towards its year end budget and he hopes to be able to install the paving prior to SALI judging taking place for the 2020 awards.



Approach road to the estate

### Team effort and special thanks

The Board of directors and office of the Estate Manager supports Rapoo and his team to ensure ongoing improvement of the estate. Rapoo says he really appreciates their assistance and that without it, he would not have been able to accomplish the upgrades. The administrator and security manager have also been very helpful, ensuring the safety of his maintenance team on site.

"I would also like to extend my sincere thanks to the Holy Redeemer Church for the stolon grass they provided to cover over 2500m² of the estate. Also a special thanks to Malanseuns Plantland for providing the plant material which has vastly improved the appearance of the estate. I would also like to thank my team for their hard work throughout all the development phases. We have undertaken 4000m² of new planting, comprising grass and plants, and we are looking forward to covering a further 6000m² by the end of 2020," he states.

Rapoo also extends his sincere thanks to the estate's residents for providing the plants and cuttings used to enhance the east and west entrances, adding aesthetic value to the landscape. "We have received very favourable comments from residents, expressing appreciation for our efforts



Old style water pumps create a decorative feature with the plants and gabion baskets

in transforming the estate. I wish to also thank my wife Delia and my children Quisha and Monica for always giving me

their support, love and encouragement. Without it, nothing would be possible," he states.



### Alfred Rapoo

In 2000, Rapoo obtained his National Higher Certificate in Horticulture from Technikon SA (Florida Campus). In 2005 he obtained his National Diploma in Horticulture from UNISA and in 2007, he obtained his Bachelor of Technology Degree in Horticulture, also from UNISA.

He has done practical work with the University of South Korea, and has worked extensively in the Middle East, undertaking projects with hotels, resorts and various properties.

Prior to commencing work at Magaliesberg Estate, he was employed as a contract manager for Bidvest TopTurf, working on the award winning Telkom Park, and before that he was maintenance manager at Sun City Resort, working for Life Green Group. He was responsible for the maintenance of Sun City's Vacation Club. From 2002 until 2006, he was assistant manager for Desert Group in Dubai, UAE, and from 2006 until 2013, he was landscape manager

for Dynamic Landscape, also in Dubai.











The plants are tightly nestled in the honeycomb arrangement of the pots

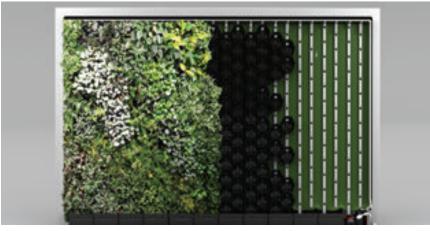
### **WORLEY GREEN WALL UPGRADE**

BY KARYN RICHARDS

Photos by Robbie Strang and Karyn Richards

Worley (previously Worley Parsons) is a leading global provider of professional project and asset services in the energy, chemicals and resources sectors. They provide a wide range of consulting and advisory services, as well as technical expertise across multiple projects. Their integrated offerings cover full asset management services and engineering, procurement and construction capabilities to meet the world's changing energy, chemicals and resources needs.

A hydroponic green wall, installed in the entrance lobby of their Melrose Arch premises five years ago, was upgraded in January 2018 by Robbie Strang of Bidvest Execuflora, who had been maintaining the original wall. Due to various problems, a suggestion was made to the client that the wall be upgraded to the present one, a modular Vicinity wall system which is locally designed and manufactured.



Vicinity modular green wall hardware diagram

#### Technical details

The wall is four metres high by ten metres wide and holds 1300 plants in total. The honeycomb structure of the new system allows for better planting design, larger pots and hence fuller, more lush planting which greatly improves the aesthetic appearance and visual appeal of the wall.

Strang explains that a plastic sheeting (splash sheet) at the back of the structure was installed as a precaution against water seepage. Aluminum racks/rods are attached to the sheeting and the plant pots, made of injection-molded plastic, clip easily onto the racks. "The honeycombtype arrangement of the pots allow for a tighter nesting of the plants, and since the pots are very close to each other, the plant design can be staggered, making it more visually appealing," he states.

A pump inside the master water tank moves water up through a pipe on the side of the wall structure, along the top and down on the other side. This looped formation ensures that the water pressure is equal all the way around the wall. An irrigation dripper leads into each of the pots at the top of the wall; water then filters down from one pot to the next, row by row, so that plants at the bottom receive the same amount of water as those at the top. Cladding around the edge of the plant wall provides a good finish, creating a type of picture frame for the plants, he maintains. Pebbles at the foot of the wall cover the drainage tray, and make for a more natural and attractive appearance.

Lighting is a key contributor to the success of the wall. Whilst the Green Star 4 certified building has ample natural light entering through rooftop skylights and penetrating through an eight level atrium to the ground floor lobby, there is insufficient natural light on the ground floor to sustain optimal growth. Natural light is supplemented by metal halide lights, mounted on the floor above, providing approximately 1000 lux. Plants with higher light requirements are therefore placed at the top of the wall.

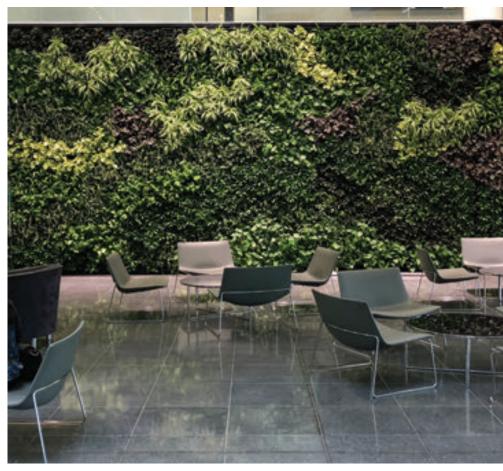
### Design details and plants used

Strang says the upgraded wall was based on the concept of biophilia, namely the need for people to be connected to a natural environment. Its literal meaning (love of nature) focusses on bringing

natural elements, specifically plants, into work and home spaces in order to improve these environments. The physical and psychological benefits of plants have long been known, especially for improving air quality and avoiding sick building syndrome. "Biophilia has become more and more important in buildings over the past 15 years and in some cases, they are designed specifically to accommodate it," says Strang.

Plants were chosen for their different leaf shapes, sizes, textures and varying shades of green. Their arrangement on the wall is informal and unstructured, creating interest to the wall. The lightly-coloured Peperomia, for example, has been placed in the middle of the wall, creating a good focal point that the eye is immediately drawn to. The following plants were used:

- · Philodendron scandens, P. monstera, P. scandens 'Mica'
- Peperomia caperata, P. 'Juli', P. obtusifolia
- Chlorophytum comosum
- Dracaena compacta
- Hoya carnosa
- Asplenium antiquum
- Microsorum diversifolium
- Rhipsalis cassutha



Overview of the wall in the reception area



The lightly-coloured leaves of Peperomia have been placed in the middle of the wall and create a strong focal point

Shaun Armand, Nursery Manager at Bidvest Execuflora, says that his design approach to the wall involved adjusting the plant palette to best suit the available lighting conditions, as well as taking into account leaf texture, colour and shape. "Each wall presents its own challenge in this regard, and designing appropriately is what makes each one unique. At Worley I blended plant species into each other to give an overall free form, but a massed effect at the same time to

enhance the design and layout. Areas of red-leafed plants draw the eye into the space and leafy green textures soften it," he explains.

Reduced maintenance and healthier plant growth, supported by a guarantee provided by Strang, were key in assisting sales consultant Genevieve Compion to persuade the client to commission a complete revamp. This made the job of introducing a variety of well selected plant species in the correct lighting conditions a much easier task.

In terms of the grouping of plants, Armand says the design element of the hexagonal planter was based on a beehive honeycomb shape, a design that has "really taken us back to nature." He says he always starts with a circular motion and then allows the wall to create itself. Once the shape and form are in place, he then works with the carefully selected plant palette so that it fits into the design. As with any eye-catching landscape plant layout, it is very important to take into consideration the colour of each plant, its leaf texture, pattern and the design ethos of the space – all this without compromising the perfect growing condition. Mixed planting is a challenge as each plant has its own watering, lighting and growing habits, he explains.

#### Maintenance

Strang says that since the wall has been upgraded to a simpler system, fewer repairs have been necessary. The Execuflora team checks the installation on a weekly basis to ensure that the drippers are working, and also trim and replace plants where necessary. Cleaning is by means of an electric sprayer which sprays water and a mild detergent onto the leaves. This washes down the wall and retains its humidity and freshness. "The client is delighted with the end result," concludes Strang.



The plants are tightly nestled in the honeycomb arrangement of the pots



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### **ILASA COROBRIK AWARDS OF EXCELLENCE 2019**

The ILASA Corobrik Awards of Excellence took place in September 2019 in Cape Town. Entries were submitted in the categories of Publications and Planning and Design.

WINNERS:In Category 1, Publications, the following awards were made:

- Future Africa Innovation Campus Insite Landscape Architects The Commons Muckleneuk Graham Young Landscape Architects

- Izinga Parks Baobab Tree Uys & White Landscape Architects, KZN Tokai Estate TERRA+

- Worcester Estate Square One



Perspective of the Cottesloe Gas Tank Foundation

Cottesloe Gas Works, Johannesburg University of Pretoria and Heloise Pieterse The concept re-imagines the site in such a way that the traces of the original form are visible and establish meaning for the tangible and intangible elements on a post-industrial site. The thesis focuses on creating awareness of the associated social exploitation and environmental contamination through the landscape



Stellenbosch Municipality Heritage Survey: Scenic Route Conservation System

experience, demonstrating that new meanings can be applied to spaces that once presented a cultural limitation.

### Stellenbosch Municipality Heritage Inventory and Conservation Management Plan – Liana Jansen

The project team set out to provide two key deliverables: a Tangible Heritage Resources Inventory, and a Heritage Resources Management Plan. The project team had to develop a framework for defining what is meant by a cultural landscape and criteria for evaluating it. They did so based on a thorough review of international concepts and best practice, followed by the application to the South African context that included pre-colonial and post-colonial paradigms.

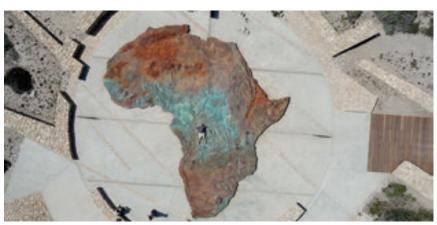
In Category 2 A & B - Bosjes Chapel -CNdV Landscape Architects, Planning & Design, the following awards were made:

The Bosjes farm was transformed

from a run-down farm to an instantly recognisable, international destination by the construction of an eye-catching chapel and landscape. The chapel garden is comprised of interconnected and distinctive landscape "rooms", each evoking a particular emotion in the user. The design elements and their soft landscaping are subtly inspired by biblical references, with a strong representation of water throughout the landscape.

### Southernmost Tip of Africa Icon **Project – Bernard Oberholzer Landscape Architect**

This landmark project aims to establish the southernmost point as a sustainable icon attraction in the Cape Agulhas region by embracing its physical and spiritual attributes. The aim is to create a memorable destination point with a unique sense of place. The design elements include low stone walls that surround the circular paved area encompassing a sculpted relief Africa



Agulhas icon map of Africa

map with vertical "blades" signalling a gateway and compass points.

#### **JUST TREES AWARD WINNER:**

Bosjes Chapel - CnDV Landscape Architects

#### TSHALA ENVIRONMENTAL SENSI-**TIVITY AWARD WINNER:**

 $Bosjes\,Chapel\,-\,CnDV\,Landscape\,Architects$ 

### THE PRESIDENT'S AWARD (Sponsored by Prime Trees) WINNER:

Stellenbosch Municipality Heritage Inventory and Conservation Management Plan

The Stellenbosch Municipality Heritage **Inventory and Conservation Management** Plan comprises four phases of research, public participation, data mapping and analysis and finally grading of heritage resources. The project was undertaken over three years from 2016 to 2019 and covered a study area that includes the remainder of the Stellenbosch municipality - incorporating most of the Eerste River and Franschhoek Valleys, the Bottelarey Hills and the related rural areas and settlements. As the core of the town of Stellenbosch had previously been subjected to a heritage inventory process, it was excluded from this project.

The project team set out to provide two key deliverables, namely a Tangible Heritage Resources Inventory and a Heritage Resources Management Plan.

It became clear that both these deliverables were dependent on the prior completion of an appropriate Heritage Resources Survey. The Western Cape has a rich and layered cultural heritage reflecting thousands of years of human settlement. This wealth of heritage resources presented an enormous task to ensure each resource was adequately captured, identified and graded.



Bosjes Chapel: The chapel and reflection pond

Beyond the tangible assets of buildings and structures, the landscape itself has cultural significance. In the Western Cape much of its heritage is tied to the evolution of the landscape through human settlement and significant events. Assessing the cultural landscape is fundamental to the management of heritage resources.

The positive impact of this project is not limited to the study area of Stellenbosch. The approach and methodologies developed and refined by the team to include pre-colonial and post-colonial paradigms are robust enough to inform future research and site assessments of cultural landscapes in the Western Cape, nationally and internationally.

The completion of the project with recognition of the importance of the landscape as a cultural and heritage resource provides an enduring asset to the profession of landscape architecture, both nationally and internationally. This project score was an average of over 95% between all the national judges involved.

### LIFETIME AWARD WINNER:

Dr Erika Van Den Berg hails from a horticultural background and has enriched the profession through instilling a passion for indigenous landscapes with a great number of students and landscape architects in an era when exotic plant material was the given scenario. She is a prime example of how landscape architects with other relevant study backgrounds can be successful and bring about a change in thinking and approach within an entire profession.

She also played a cardinal role in the revival of ILASA during the mid-90's. ILASA has struggled to sustain its momentum to the extent where it had basically died down, with little to no activity or upholding of its constitution. Dr Van Den Berg managed to involve young graduates and professionals to revise the constitution, come up with a restructured management model allowing for regional offices and improving the sustainability of ILASA overall through implementing various alterations to the previous dispensation. This prepared ILASA for the new era of the Institute's' very important role as a Voluntary Association on the verge of BOCLASA (Board of Control for Landscape Architects in South Africa) being transformed into SACLAP. This exercise also allowed for the tracking of ILASA's donated funds and honouring its obligations to those who entrusted funds to be managed by ILASA. The revival of the Merit Awards was an outcome of this process.

Throughout her career, she demonstrated how knowledge of plant material can be applied in the skilful hands of a landscape architect to achieve designs that surpass the performance of exotic and mixed plant material designs. This set a trend and demonstrated to the profession the versatility of our indigenous plant bank.

She receives the Lifetime Award for her selfless commitment to reviving ILASA, preparing students and young landscape architects for a future in the profession, and leading by example.



Erika van den Berg receives the Lifetime Award from ILASA President Eamonn o' Rourke

## JOHANNESBURG INTERNATIONAL FLOWER SHOW

The Johannesburg International Flower Show (JIFS) took place over five days in October/ November at Waterfall City, Midrand. The official sponsor was online flower and gift retailer, Netflorist, with the Netflorist Grand Pavilion of Flowers being the central feature of the show.





ey elements in the pavilion included floral chandeliers, floral art exhibits, a super food garden designed by Amorentia Estate and Nursery, flowers on sale from Plantland, Ludwig's Roses and The Garden Shop.

The gardens and floral artistry on display were judged by internationally acclaimed judges Pascal Garbe and Sharon McGukin. Garbe is a renowned French garden designer and McGukin is recognised for her floral expertise.

The show was a sustainable and environmentally friendly event, and was a solar powered in collaboration with Nu Power. Strict water wise and waste management practices were implemented and after the event, plants and flowers were transported to schools, old age homes and under-privileged communities where they were re-purposed to create spaces of greenery.

The show also brought together local and international landscapers, gardeners and floral designers who mentored future landscapers. In addition, the show advocated for the Agri-colleges International e-learning platform to encourage the development of South Africa's young future farmers. For children, a seedling park enabled them to learn skills such as how to make their own compost and flower arrangements, flower and seedling pot planting.

www. johannes burg flower show. com









### SKILLS DEVELOPMENT FOR TUT STUDENTS

oving on from studies at university into the workplace is a daunting reality that students have to face after completing their academic subjects at Tshwane University of Technology, in the Department of Horticulture.

Although they have an idea what Landscape Technology is about, the theory and the practice are vastly different things. In their third year, students have to complete a year of work-integrated learning or practical at an organisation or company in the green industry. This is a great opportunity for them to put theory into practice, further develop their skills and expand their knowledge.

TUT therefore calls on role players in the green industry to open their doors and assist wherever they can. Students are expected to become involved in as many aspects of the company as possible, and there is no prescribed list of skills to be covered as each company or organisation works in its own way, focusing on different aspects of the green industry. Students will need to complete two reports during their time at an organisation for submission to the Department of Horticulture, under the guidance of the work-integrated learning co-ordinator.

A stipend will greatly help to pay for essentials such as transport and accommodation. AgriSeta may assist companies to pay this, and it can be applied for during the window period in September and October, for the following year.

Companies and organisations who would like to assist in offering this working and learning experience are invited to contact Lana Marais on 012 382 4876 or maraisl@tut.ac.za

### NEW RANGE OF POKON GRANULAR FERTILISERS



okon, Holland's plant care leaders, have released eight new specialist granular fertilisers in easy to manage 1kg boxes. Adding to their already extensive range of plant care products, each recipe has been scientifically formulated to ensure that plants get all the nutrients they need, in the correct quantities.

Safe for humans and pets, each formulation slowly releases nutrients for up to 120 days, which means that plants only need feeding every four months. Because the granules are made up of enriched organic fertilisers, the results will be evident in a very short space of time. Not only will plants be in peak condition, with more flowers and more vibrant foliage, they will be less susceptible to diseases and attack from insects.

Pokon has been providing gardeners with quality products since 1929 with its very first plant food formulation P₂0₅K₂ON₂. Using only 100% natural, raw materials, their new organic fertilisers deliver all the essential nutrients, macro and micro elements that plants need. Imported directly from Holland, the new range consists of:

Vegetable garden fertiliser (NPK 5:3:10)
 -contains extra potassium for strong, vigorous plants;

- Green plants fertiliser (NPK 9:5:8 + 3 MgO + 1 Fe) – with added magnesium for deep green leaves, this formulation is ideal for foliage plants in pots and in the garden:
- Small fruit fertiliser (NPK 5:3:5 +2MgO)

   this is a natural, organic fertiliser, ideal for strawberries, gooseberries, blackberries etc;
- Lavender and herb fertiliser (NPK 6:2:8 + 2MgO) – 100% natural raw products are used in the ingredients to ensure that plants not only perform well, but that the harvest is safe to eat;
- Hydrangea fertiliser (NPK 8:4:8 +2MgO + 1Fe) enriched with naturally occurring minerals (zeolite) and organic matter, this formulation feeds plants and improves the soil. It is also ideal for Azaleas, Rhododendrons and other species that thrive in acid soil. The addition of magnesium oxide and iron gives the plants more intensely coloured flowers;
- Box tree and hedge fertiliser (NPK 9:5:8 +3MgO +1Fe) – formulated to ensure that box trees and hedges grow at their best, the added magnesium and iron will ensure that hedges boast healthy, deep green leaves;
- Rose fertiliser (NPK 8:4:8 + 2MgO +1Fe)

   this organic fertiliser delivers quick results as it is enriched with naturally occurring minerals (zeolite) and organic matter (algae); the addition of extra

- magnesium and iron increases the colour intensity of flowers;
- Conifer and yew fertiliser (NPK 6:8:10 + 2MgO +1Fe) – the addition of extra magnesium and iron makes for healthy looking plants with deep green leaves.

www.hadeco.co.za

L3/

### Errata –LSA Issue Number 90

In the article entitled Conserving A Critically Endangered Ecosystem, the caption on page 27 should read as follows: Proteadal is located in proteaveld (grassland and proteas) with three protea species on site: (clockwise) scattered *Protea roupelliae*, a stand of *Protea welwitschii* and extensive stands of the common *Protea caffra*.

In the article entitled Carnivorous Plants, the caption under the photo on page 18 should read Venus Flytrap. The caption under the top right-hand photo on page 19 should read Tropical Pitcher Plant.



### **EVERGREEN TURF OPEN DAY**

The annual Evergreen Turf Open Day took place in August 2019. The photos below show some of the exhibitors' machinery on display.









## JOHN DEERE LAUNCHES NEW TRIPLEX MOWERS

uality labour availability and tightening operating budgets continue to be challenges, and understanding these customer needs was a key driver behind the development of two new reel mowers from John Deere the 2750 Precision Cut <sup>™</sup> Triplex Mower and the 2750 E-Cut<sup>™</sup> Hybrid Triplex Mower. Designed to provide premium cut quality regardless of operator, improved grass catcher accessibility and reduced operating costs, the new mowers provide a lightweight, open platform machine that is further enhanced by the proven TechControl™ system. Consistent cut quality across all operators, contour following, and grass catcher accessibility are critical needs for customers. The 2750 triplex mowers are designed to tackle these challenges and take the stress out of mowing, with an enhanced TechControl system that allows for more precise control than ever before. Using the passcode protected TechControl system, managers and technicians can input commands, controlling nearly everything regarding the operator's performance, frequency of clip, turn speed, clean up pass speed and

how fast the cutting units raise and lower. The TechControl system ensures that regardless of the operator, the end results are the same, providing consistent cut quality on the course.

An industry exclusive on the hydraulic model, and available on the hybrid unit, the frequency of clip can be programmed by altering parameters on mowing speed, reel speed and the number of blades on the reel. Adjustable turn speed allows the superintendent to control how fast the operator is able to turn, minimising chances of turf damage. Additionally, the superintendent or technician can select Eco Mode, which electronically controls the engine speed to conserve fuel. With Eco Mode, the engine RPM automatically adjusts based on the load, saving up to 30 % on fuel and reducing operating sound levels.

The 2700 and 2750 triplex mowers feature a lightweight, open platform frame design with a low centre of gravity for excellent stability and traction performance. The decreased weight reduces tyre tracking

and compaction, and the open platform design makes it easier to access the centre grass catcher. The grass catchers can be easily removed and installed with one hand and have a translucent yellow option for better visibility of clippings levels.

Another notable change on the 2700 and 2750 models are improvement to the steering column, which features two points of adjustment – the column and steering wheel – and requires no tools, maximising operator comfort.

For further information contact Carla Engelbrecht on engelbrechtcarlac@johndeere.com





John Deere 2700 and 2750 triplex mowers

## MTAWARIRA IS HUSQVARNA'S FIRST AFRICAN AMBASSADOR

or centuries, Husqvarna has been providing world-leading outdoor tool solutions. The brand has a large footprint in Africa and is expanding rapidly, making it the ideal time to partner with local personality and rugby player Tendai "Beast" Mtawarira. He says he is proud to be working with such a professional team and its world-class brand.

Welcoming Tendai into the Husqvarna family meant ensuring that he has all the products needed to help him take the best care of his garden. One that is making a big difference to his home is the brand's best-selling automower®, one of Husqvarna's battery-driven "Silent Nature"™ products. It is powered by electricity, does not produce harmful emissions and works hard in virtual silence. Another Husqvarna item making life easier for the Mtawarira family is the high pressure washer.

According to Husqvarna Africa's regional marketing manager Jenna Robinson, the brand is widely recognised throughout the continent, with a presence in 30 African countries. The company is looking forward to strengthening its already strong position by partnering with Tendai. Currently, the product range for Africa includes over 280 items and the catalogue is expanding as it innovates. Husqvarna wants to move in a way that is strategic as well as sustainable and by 2025, 60% of the global population will be living in cities.

Fewer will have gardens and shared urban green spaces will become more relevant. Says Robinson: "We need to think ahead, plan for the future and worry more about emissions – hence our extensive range of battery products and 'silent nature' drive. Less noise, less disruption, less harm to the environment."

www.husqvarna.co.za





## LASHER TOOLS: A PROUDLY SOUTH AFRICAN ICON

or the past 90 years, Lasher Tools has played an important part in creating jobs and helping to build South Africa's economy. With a history that predates even Arcelor Mittal (formerly Iscor), Lasher started out as the African Shovel Company, providing tools for Johannesburg's gold rush. It has grown into a thriving manufacturer, producing a range of more than 1000 tools for the mining, forestry, agricultural, construction, DIY and gardening sectors.

Lasher is a South African company committed to creating employment and wherever possible, to upskilling its employees. Proudly South African believes that "by choosing to buy local, we buy back jobs and the future we are destined for". To become a member, applicants must adhere to the following criteria:

- at least 50% of the cost of production must be incurred in South Africa. Lasher sources its steel and plastic locally and its tools are exclusively manufactured at its three factories in Wadeville, Germiston and Ladysmith;
- the product or service must be of a proven high quality. Lasher is a manufacturer of tough, reliable tools. Its factories are ISO 9001 compliant and no shortcuts are taken in the manufacturing of its products. Raw materials are high quality and processes are followed according to a tried and tested recipe. Lasher produces the only SABS-accredited wheelbarrow;
- the company must be environmentally responsible and adhere to production processes that are environmentally acceptable. Metal and plastic offcuts are recycled and there is minimal waste generated in Lasher's ISO 9001 factories. Lasher has produced the world's first recycled and recyclable Ecobarrow;
- the company must comply with current labour legislation and adhere to fair labour practices. Lasher is highly committed to its staff and has a proud history of longstanding employees, many of whom have followed their parents into employment at the company. Lasher remains dedicated to its mandate to boost the local economy by growing the business from its South African base, while extending its export network to the rest of Africa, the US, Europe and Australasia.

On 25 September 2019, Lasher hosted members of the media at its Wadeville factory as part of its 90th birthday celebrations. The event provided an opportunity to experience local manufacturing at the coalface and to understand why supporting local products bolsters job creation and South Africa's economy. In addition, it showed the hard work that goes into manufacturing quality hand tools from engineering and design through to the hardening and tempering of high grade steel for added strength and durability.

### **Proudly South African**

Proudly South African was founded in 2011 and is the country's official 'buy local' advocacy campaign. A registered NPO, it is partly funded by the Department of Trade and Industry, but it also raises funds through membership fees and ad hoc sponsorship.

Proudly SA's mandate is to drive increased levels of local procurement in the public

and private sectors. It encourages businesses and individuals to procure all their consumables from local sources and local manufacturers. In the same way, large businesses are encouraged to procure from small, local businesses and PSA assists all its members to find access to new markets, and to trade with each other

The PSA logo assists consumers to make local purchasing decisions based on the knowledge that products bearing the logo have been vetted for local content and high quality. Consumers should look for a "Made in SA" label and choose local over imported goods. Buying locally manufactured goods and services is a recognised contributor to job retention and job creation.

In August 2018, PSA launched www.rsamade.co.za as its exclusive online shopping store.

For further information contact Albert Louw on 011 825 1100



Ian Kendal, MD of Lasher Tools

### SUPPLIER-CLUB RELATIONSHIPS IN GOLF COURSE MAINTENANCE

igh-performing greens, visual appeal and tee positioning that accommodates varying abilities are among some of the key considerations for golfers. However, achieving and maintaining these attributes is a fulltime job requiring agronomic expertise, experience, a well-trained crew, and above all, a reliable fleet of equipment. Maintaining an average 18-hole golf course - which is larger than 70 football fields - is very labour intensive and may also have numerous bunkers, a few miles of cart paths and many other course features.

At Houghton Golf Club in Johannesburg, Smith Power Equipment adheres to a meticulous turf maintenance regime to ensure the course's aesthetic appeal and overall playability. In recent years, the greenkeeping team has standardised its fleet on Toro machines supplied by Smith Power Equipment, with excellent results.

Course superintendent Stuart Ross says spring treatment is the chance to achieve an optimum foundation to ensure the grass performs during the growing season. This involves several processes for dethatching all kikuyu areas as well as aerification on tees, fairways and green surrounds.

Typically, spring treatment at Houghton Golf Club starts on the 1st of July with the bunkers. There are 64 bunkers in total and work takes two to three weeks with a team of 6-10 people. Due to the design of the bunkers, normal brush cutters can't be used because they are too aggressive and the bunkers will therefore lose their unique shape. Much of the work is done manually.

Work on the tee surrounds commences in August, moving on to the rough, then the out-of-play areas and eventually tees, fairways and green surrounds. September starts with high traffic areas, being tees and fairways.

To undertake this process, a Reelmaster 5510 is on site for cutting fairways. A key feature of this machine is the Dual Precision Adjustment (DPA) cutting units which maintain levelness and hold adjustments. The DPA allows quick bedknife to reel adjustment. Harder reel and bedknife steel retain a sharp edge up to three times longer to minimise the need and frequency of adjustments, backlapping and grinding leading to healthier turf that

Two Reelmaster 3100-D mowers are also on site. With a 21.5 hp (16 kw) Kubota engine, the Reelmaster 3100-D has the power to climb and power to cut through difficult mowing conditions. It is available in a 183 cm or 216 cm width of cut. With a choice of 5, 8, and 11 blade reels and adjustable reel speed control, this mower can be configured to meet all mowing applications.

Another Toro mower on site is the versatile Greensmaster 3250-D. A large, 3 cylinder, Kubota® 902 diesel engine making 24.8 hp (18.5 kw) @ 3 600 rpm, governed to 2 750 rpm, provides the performance needed to use on greens and all areas around them. Ross says they have since placed an order for another 3250-D.

Also on site is the Groundsmaster 3500 - a revolutionary triplex rotary mower designed for superior performance trimming. The free-floating Contour Plus cutting decks allow mowing of undulating terrain without scalping. The powerful engine and exclusive traction drive system gets the mowing job done quickly.

On the green surrounds, considering the tighter and complex nature of the area, a turf aerator is used, as well as the Greensmaster 3250-D to get around small corners.

Houghton Golf Club also owns two Toro Workman MDX units, a Toro 1250 spray tank and six Flex 2120 walk-behind mowers. The spray tank is used to spray greens, tees and fairways usually every week, and sometimes up to four times a week on various parts of the course. The Workman MDX's are great utility vehicles used to carry goods, staff and for towing purposes.

The Greensmaster Flex 2120 mower delivers consistently good results on the bentgrass greens. It cuts closely to follow severe undulations at extremely low heights, and provides an excellent solution for greens that require precision mowing. The unique and patented Flex suspension system uses an integrated linkage system to allow cutting units to pivot around the centre of the front roller, which prevents side-to-side scrubbing of the putting surface.

Knowing that equipment is vital in achieving course maintenance goals, Houghton Golf Club has standardised its fleet with Toro machines, cementing its strong relationship with Smith Power Equipment.

For further information contact Robert Keir on 011 284 2000



Stephen Mangold (left) of Smith Power Equipment and Stuart Ross of Houghton Golf Club

## URBAN RIVERINE RENATURALISATION

Chris Brooker of CBA Specialist Engineers operates in conjunction with other professionals providing expertise in surface water management, largely in the urban environment. Three such projects completed over the last six years have involved riverine renaturalisation: two for the City of Johannesburg and two phases of stream rehabilitation for Fourways Gardens residential estate.

Environmental journalist Carol Knoll interviewed Brooker on behalf of *Landscape SA*, and he made the general comment that urban rivers have largely been treated as stormwater drains with little attempt to incorporate them into the urban fabric, both from a social and ecological perspective. A professional team with the necessary skills can attempt to correct this through a process of renaturalisation, as illustrated by the Fourways Stream in the aforementioned residential estate, the Jukskei River in Bruma (Lake) Park and the stream running through Paterson Park.

BY CAROL KNOLL

All photos by Chris Brooker, unless otherwise stated

rban rivers and streams should be seen as recreational opportunities and renaturalised to return plant and animal life to areas of urban open space, helping to create ecological awareness amongst city dwellers. Creating a near natural river profile will return functions such as varied water flow to create different habitats, erosion control, flood control through absorbent capacities and filtration of pollutants.

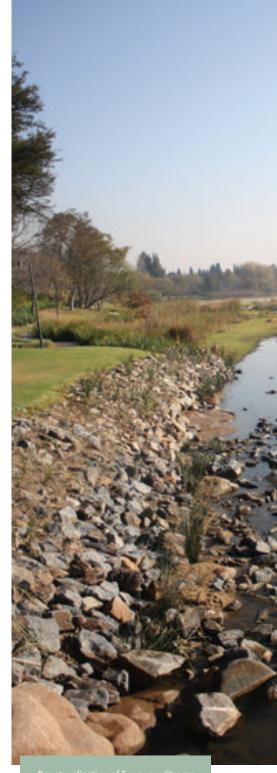
Brooker points out that the dynamics of a 'natural' river, such as its meanderings through a floodplain, cannot be managed in an urban environment and the system needs to be engineered. The urban river cannot be allowed to change as it would in a natural area but has to be a stable course. He adds that movement of sediment down a renaturalised river is expected, as illustrated by the development of sandbanks at Bruma. Some of these will become vegetated and stable while others may remain mobile. Any sandbanks that cause an increase in flood levels would have to be removed as part of normal

maintenance.

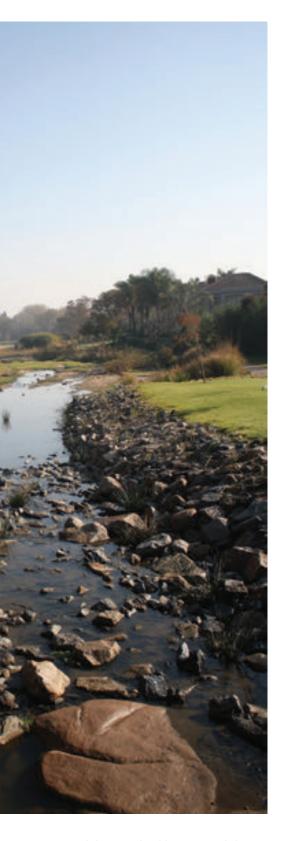
Boulders in a renaturalised channel need to be placed for stability, whereas in a pristine river, boulders will roll with the water. Engineering expertise is required to understand flow regimes: the nature of stresses that occur on the streambed and along the banks under different flood conditions. Reeds, rushes, sedges and veldgrasses will tolerate high flooding if they are rooted firmly. Although such riparian vegetation will tolerate quite high velocities, it will only do so for short periods.

Brooker explains that the size of the boulders to be used in the riverbed should be determined by the friction of the flowing water. It is possible to calculate the size of the boulders needed to create stability dependent on the variation of textures (surfaces) along the riverbed.

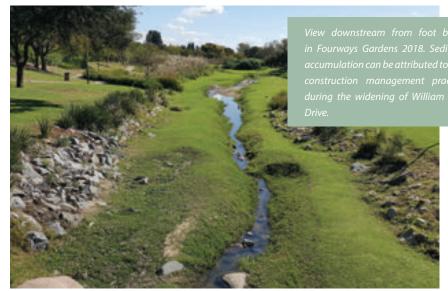
It is also necessary to consider habitat diversity: the whole range of river life, such as pockets of topsoil worked into gaps for planting of marginal species,



in Fourways Gardens after placement of boulders and planting of rushes, sedges, etc, in 2013. NLA Landscape Architects worked with CBA on the design while landscape contractor Earthforce constructed the renewed riverbed and banks.



voids between boulders to provide homes for crabs and resting places for fish, and the substrate required for caddisfly and other insect larvae. He says that another important habitat is known as 'stones in current' which is simply water running over the surface of boulders. All of these considerations in the renaturalisation





process relate to the topography and geology of a natural river or stream.

The renaturalisation of the stream on the Fourways Gardens property initially involved the rehabilitation of an erosion donga with vertical sides. This comprised reshaping, stone-lining and planting of marginal species in the riverbed and channel edges. Vegetation of sandbanks was allowed to establish naturally. The size of boulders used was determined by the gradient and great care was taken to create a diversity of habitats through, amongst other features, a series of small waterfalls and plunge pools, riffles and 'stones in current'. Further upstream on the property, a series of weirs was created to trap sediment, guard against erosion and allow for flooding onto lawn areas. Johan Barnard of NLA and Earthforce landscape contractor, Jiri Pechous, were involved

with Brooker on this project.

In Bruma (Lake) Park, the renaturalisation of the Jukskei involved demolition of the dam wall and draining of the lake which had become a cesspit, and the rehabilitation of that portion of the Jukskei by civils contractor Basil Read in 2014/15. Landscape architect John Drummond selected the plants, many of which were provided by environmental consultant Paul Farrell. The river course is protected with boulders to a depth of about 1.2m, from riverbanks into riverbed. A large area covered with Cynodon lawn serves as a floodplain and provides a smooth flat area for recreational activities.

Stones and boulders came from the Gautrain construction rock dumps, and sediment from the lake and a basement excavation was used to rebuild the



The unsightly, polluted Bruma Lake on the Jukskei River in 2013, prior to the start of the renaturalisation project.

The naturalised river through Bruma Park, the day after the storm that flooded the N3 in November 2016. Rain was also intense in the Bruma area as shown by the flotsam line and the brown sediment on the banks... but the stream suffered no damage.





An aesthetically pleasing renaturalised portion of the Jukskei River flowing through the grassed floodplain of Bruma Park continues to function well later in November 2016. Landscape architect John Drummond worked with Brooker on the design. Upkeep to remove weeds and rubble after storms is essential and this is done by Joburg City Parks.



The concrete stormwater canal, a fenced off barrier in Paterson Park, prior to the renaturalisation.

riverbanks. This renaturalisation project has reinstated the link in the riparian corridor of the Jukskei. Birds such as three Ibis species have returned and Greenbacked Heron have been sighted in the reeds.

Four hundred metres of the concrete canal for stormwater drainage was demolished in Paterson Park, along with the barrier fencing. The 'stream' was stone-lined with grassed floodplains. Both Karien Hanekom, who served as the landscape architect for Jo'burg City Parks, and Johan Barnard, selected a very diverse planting palette with a mix of aquatic, marginal and dryland plants: trees, shrubs, herbaceous species, grasses, rushes and sedges to help deal with the sediment from the upper catchment which fluctuates and

is predominantly the result of building activity.

Planting of the river channel was done by the civil contractor, Murray and Dixon, but planting and installation of landscaping elements elsewhere in the park was done by Jacques Hugo of Endemic Developments.







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