

# urban futu

urban design . architecture . landscape architecture

DESIGNING TOMORROW'S NEIGHBOURHOODS

CMAI. The Boatshed. Thesen Islands. Knysna, South Africa

www.cmai.co.za

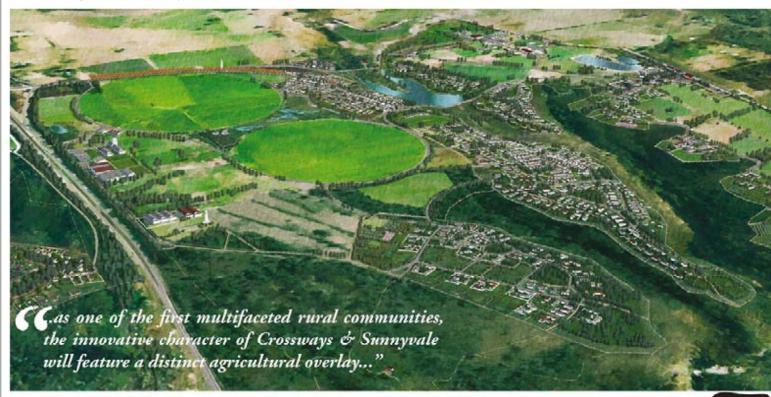
### increasing support for pioneering CROSSWAYS Situated on the eastern boundary of the Kouga Municipal area, bordering the renowned Van Stadene Piver Valley and Wild Source SUNNYVALE

ollowing scoping report approval and a highly successful Open Day in July 2009, CMAI's latest development project is rapidly moving towards the final stages of its approval process. Already making major headlines as a result of its positive assessment in Parliament earlier this year, the project has received the support of both the local municipality and the Minister of Agriculture, Forestry & Fisheries. Stadens River Valley and Wild-flower Reserve, the country-lifestyle development of Crossways & Sunnyvale will consist of several rural neighbourhood pockets, offering idyllic country living and breathtaking views of the surrounding landscape.

Planned to be developed as one of the first multifaceted rural communities, the innovative character of Crossways & Sunnyvale will feature a distinct agricultural overlay with the intention of unlocking the full potential of the area's rich rural context. The project will feature a scientifically planned dairy farm with capacity to double current milk production and available grazing pastures, in line with



the mandate of the Department of Agriculture, Forestry & Fisheries. The inclusive character of this 560ha agri-village will also provide a new lifestyle option founded on the concepts of New Ruralism, supporting a sustainable development model for agricultural production.





The development will include a state-of-the-art milkingparlour, onsite training and education facilities, light "cottage" industries with related retail, commercial and office components, as well as various eco-tourism and recreational facilities such as a functioning railway station along the renowned Apple Express route.

[left] Chief Michael Williams of the Gamtkwqua Khoisan First Nation, who came out to give his support and approval of C+S's recent Open Day

With strong support from the local Thornhill community who will directly benefit from this unique development model, the project will provide greater opportunities for rural growth and economic stimulation, including job creation, equity and ownership to previously disadvantaged stakeholders. Training, education and the expansion of the existing agricultural and dairy farming industry will also provide suitable stimulus for sustained rural development.

Cont. on pg 4

cituated halfway between Port Elizabeth and Knysna, St. Francis Bay offers a Located on one the last empty stands of the serene getaway to the surrounding beauty of the Eastern Cape's scenic Kouga region.

With access to a number of highly sought after opportunities, including an extensive navigable river and canal system linked to the Kromme River estuary, lagoon views and golden beaches, the area is renowned as a water sports and recreation mecca, offering both residents and holiday makers an exotic marina lifestyle.

renowned St. Francis Bay Marina Village, the distinctive site of the St. Francis Waterclub emphasises the surrounding beauty of the landscape, providing an exclusive experience of living on the water's edge.

The St. Francis Waterclub will consist of fifteen three-bedroom apartments, as well as two four-bedroom family apartments — all with canal frontage and private access to a dedicated slipway and communal jetty facilities. The seventeen apartments have been designed with upmarket finishes, and will each include a swimming pool overlooking the canal edge. The development will blend seamlessly into the surrounding residences, matching the traditional white walls and thatched roofs which characterize the St. Francis Bay Marina.

Construction of phase one is expected to commence in 2010, with the St. Francis Waterclub set to become a prime addition to this unique marina village.











ith the international appeal of the Seychelles as an exclusive holiday destination of extraordinary beauty, the proposed Banyan Tree Ocean Estate - as designed and planned by CMAI in a Joint Venture with Banyan Tree Seychelles - will include the development of 47 luxury villas on a beautiful headland nestled between Intendance and Takamaka Bay.

The project will minimise its impact on the local environment through appropriate design that takes cognisance of the unique environment. Each hand chosen site was carefully selected by the CMAI team, detailing all distinct natural features before each house is individually designed. A cornerstone of this approach is thus to allow the design of the villas to be strictly guided by the existing natural environment and a strict design approach which incorporates both active and passive "greer" measures to achieve a sustainable

and ecologically conscious development. The key to this design philosophy therefore lies in capturing the unique essence and sense of place.

#### Current Status:

In September 2009, following successful pre-consultation meetings held with the Seychelles Investment Bureau (SIB) and Presidential Cabinet - outlining the project's intentions to obtain approval for the commencement of the development and EIA process - principle SIB approval was granted for the proposed extension of the Banyan Tree Resort. CMAI has begun working on obtaining final Planning permission, with approval expected in the first quarter of next

Marketing and Sales of these exclusive villas will commence towards the end of 2010. For more information, please contact Annerette Fourie on +27 (0)82 452 1930 or +248 383 500, or via email: sales@golfandmarine.net.

## FARMING, AGRICULTUR

Development densit





A reduced development footprint ensure to agriculture and nature conservation.

Dry Mill - apartment ...

Calling for an open plan, contemporary holiday apartment, the design brief for the alteration of this Drymill Unit required a dual approach in creating a layout that was more functional whilst also maximizing available views; a strategy of minimal change for maximum impact.

The result was a light filled interior with an easy flow, encapsulating the client's unique style through several altered and original interior elements.

With the breaking down of internal walls, the renovation of the entrance allowed the apartment to open up to a larger and more light filled entertainment space. This open nature of this space is further emphasized by a new floating bar counter, encouraging views to the outside. Mirroring the façade of the adjacent unit, the new position of the entrance enhances the overall Drymill elevation whilst providing a more practical and visible entrance location to the apartment. Renovations to the first floor also allowed for the conversion of a three bedroom apartment into four, with ample space for comfortable living and unwinding.

As outdoor living and entertainment were seen as conducive to a holiday apartment, alterations to the pool area were critical; a new deck, installed at the same level of the existing verandah, create a soft appearance and touch to the new external areas. Furthermore, the existing jacuzzi was repositioned from the second floor to next to the swimming pool; in its place, a new cocktail bar with canal views provides an equally fitting replacement.

The inclusion of more windows around the stainwell, coupled with white painted doors, architraves and lighter cupboards served to uplift and soften the space. To compliment this, dark timber elements, as used in the cantilevered bar counter and gas fireplace, became strong contrasting accents as well as a source of outstanding craftsmanship.

While working within the confines of an existing space is not always easy, the alteration of T49 has successfully served to enhance not only the living spaces available, but the overall experience of this Drymill holiday apartment.





ith almost three quarters of South Af-

rica's poor located outside major urban metropolises, rural areas are arguably the most impoverished areas in the country.

Characterised by inadequate access to major economic centres, lack of service delivery, limited opportunities for development and job creation, as well as high lev-

els of unemployment, these areas have long been left in the shadow of more profitable urban development

Rural development has recently been identified by



## RURAL DEVELOPMENT

scenario vs conservation + agriculture



Scenario C

10 000 houses at density of 20 houses per hectare = 500 Ha Development

3500 Ha Conservation + Agriculture

s more land is dedicated

4000 Ha Watershed accommodating 10,000 houses

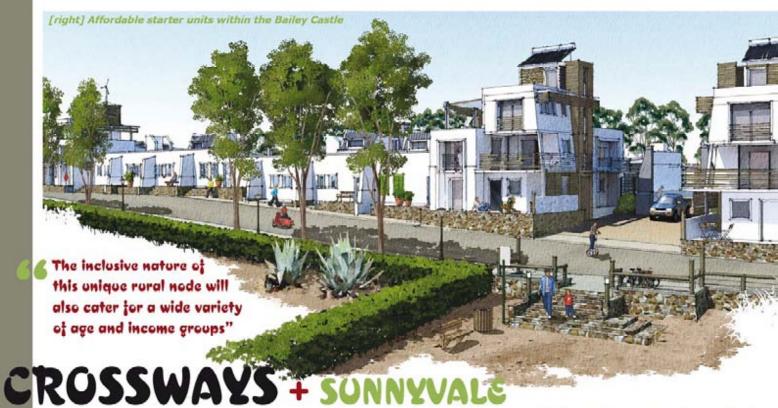
The protection of a strategic land base for our children's future should be a core principle that runs throughout SA farm policy.

government as one of the top five priorities within the next five years. With a number of policies being implemented to empower the rural business and agricultural sector, the expectation is that local farming industries and strategic land reform measures will successfully uplift the increasing population of rural poor, contributing to the improvement of rural livelihoods in this developing sector.

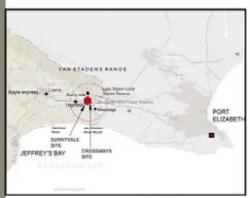
Yet with agricultural businesses steadily declining and rural unemployment rapidly rising, a grave concern is that current trends in global markets are effectively undermining government's approach. With market forces dictating more farms operating on larger economies of scale in order to remain viable – producing more for a higher return with fewer, yet arguably better skilled (and well paid) employees – this has resulted in the agriculture industry becoming more efficient with fewer job opportunities being made available.

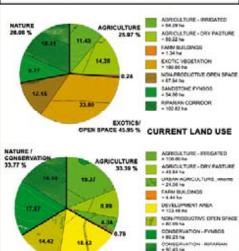
Central to economic growth, the agriculture sector contributes more than 10% of formal employment, with extensive linkage effects to both local and foreign economies. Worryingly, surplus producing commercial farms account for over 90% of production on 80% of land while small-scale communal subsistence sector accounts for the rest. With over 76% of rural families living in severe poverty, the limited availability of food, job creation, development opportunity and institutional confusion often undermines sustainable rural projects launched at local level.

Despite the intentions of current government policy, the conclusion reached is that agriculture cannot solely be the central pillar in a workable rural development model. In light of this, workable models such as Crossways & Sunnyvale are needed to uplift the rural economic sector — empowering local residents in a sustainable way which actively contributes to lasting job creation, housing and poverty alleviation in a marketable and mutually symblotic manner.



#### towards a sustainable rural development model





[above] Through its efficient combination of residential and agriculture development, C+S achieves a gross increase in available irrigated pasture and natural conservation areas.

OPEN SPACE 32.64 % PROPOSED LAND USE



Jeffrey's Bay, Humansdorp and Port Elizabeth, within easy commuting distance of the CBD and airport, Crossways & Sunnyvale (C+S) is surrounded by an array of unique attractions and activities for the whole family.

Situated adjacent to the prestigious **Woodbridge College** and Preparatory school, the site provides easy access to various excursions and day activities including popular mountain bike trails, hiking through the **Van Staden's River Gorge** and **Wild Flower Reserve**, as well as trout and bass fishing. The area also boasts the world's highest narrow gauge railway bridge, still in use by the renowned Apple Express.

The project is envisioned to include a range of lifestyle neighbourhoods and residential clusters, incorporating a number of residential opportunities and stand sizes from small starter homes and row-houses on stands of 150 square metres, to large scale plots, farmsteads and smallholdings overlooking the picturesque kloofs and valleys. The inclusive nature of this unique rural node will also cater for a wide variety of age and income groups, including opportunities.

An integral component of the development will be the restructuring of the commercial dairy farm which will be holistically re-planned to include a milking parlour with onsite education and training facilities offering both formal and practical courses in farm, dairy and herd management. Currently no such facilities exist in the region and it is hoped that this capacity can be used in future to enhance farming skills throughout Kouga and its surrounds. Through this restructuring, and the expansion of available grazing pastures, the existing dairy farm will be able to effectively double its current herd size, increasing productivity, efficiency and creating additional job opportunities.

The operation of the commercial dairy farm will also anchor a planned farm-village and country lifestyle precinct. In addition to the milking parlour, this will include a multipurpose centre, organic produce market, a small restaurant and retail component, B&B accommodation and working farm buildings - allowing visitors to interact and experience authentic farm life. Accommodating a range of possible events, the multipurpose centre will host various agrishowcase functions, auctions and exhibitions. Interest has already been expressed by several auction and livestock organizations, as well as the Eastern Cape Holstein Association. Additional facilities will also be provided for equestrian events such as dressage, showjumping and cross-country trails.



The farm will also contribute to the provision of quality social and agricultural resources, aiding social upliftment and providing a workable economic empowerment solution for local workers and entrepreneurs. This fundamental objective of C+S will see the farm operation equally divided between the Home Owner's, the Farm Management and the Farm Workers, providing ownership of farmland as well as onsite housing for farm workers without any cost to local government authorities. Through this system of ownership and farm administration, the project intends to operate a BBBEE system that encourages supervisory and sustainable socio-economic upliftment, providing not only job and training opportunities for local residents, but an equitable profit sharing agreement in the future development of the farm.

Through an integrated **urban agriculture system**, including seasonal fruit trees and berries along avenues and in major public spaces — the fruit of which will be available to residents with surplus produce being managed by the homeowners and sold at local markets — the project will highlight a more **sustainable way of living**. The dairy farm will also form a mutually beneficial relationship with the proposed village and local community, supplying fresh milk, real butter, cheese and yoghurt to local residents.

In conjunction with new irrigation systems, a large fresh-water dam will provide water for farming as well as offering residents opportunities for water-based recreation, including walking and hiking trails – ideal for bird watching and fishing. Indigenous plant species from the Eastern Cape coastal plateau belt will govern planting in open areas, with a special nursery being created to propagate planting material. A list of

Ileft) attractions & activities on Crossways

recommended species will also be available to homeowners. **Nature conservation** will also play a pivotal role in defining the character of **C+S**, with extensive portions of rehabilitated **indigenous fynbos**, **kloof** and **riparian** areas being used to establish an **ecological biodiversity corridor** along the Van Staden's River Gorge – linking the Baviaanskloof to the Indian Ocean.

C+S will include the extensive use of energyefficient materials, passive building design 
principles, rain-water harvesting and waterrecycling systems, as well as the processing of 
organic waste for composting – reducing the 
need for chemical fertilisers as well as providing 
for on-site job creation. Innovative energy towers 
will also be utilised throughout the development, 
incorporating photovotalc panels, solar hot-

water-geysers, wind turbines and a broad range of sustainable technologies and applications for reducing energy usage.

Through its groundbreaking rural development model, C+S aims at achieving a delicate balance between development, agriculture and nature conservation; empowering local residents to actively contribute to lasting job creation, housing and poverty alleviation in a marketable and mutually symbiotic manner. Emphasizing government's policy towards triple-bottom-line development, the project stresses the importance of energy efficiency, land conservation, social upliftment and the principle of "reduce, reuse and recycle", creating a healthy and sustainable lifestyle for a broad range of needs and income groups.

Combining agri-farming with residential development, farmstead villages provide the benefits of a tranquil rural lifestyle while offering the comfort, technology and amenities associated with an urban development.

forms, usable courtyards and generous living spaces.

Marketing and project launch date is expected for early 2010. For more information, please contact Thea on +27 (0)44 382 6732, or via email: thea@theboatshed.co.za

iensitively selected sites, based on existing



new urbanist design

#### Thesen Islands outperforms economic forecasting

conomic Impact Modelling has proven to be a useful tool for forecasting a development project's potential impact on the local and regional economy. Contrary to general perception that it represents an over-estimation of the actual impacts, recent survey results have indicated the opposite to be the case of the Thesen Islands development in Knysna.

It is both common practice, and a basic requirement of the Economic Impact Assessment (EIA) process, to request economists to determine the potential economic impact of proposed development projects. Economic impact refers to the effect on the level of the economic activity in a given area, as a result of some form of external intervention in the economy. In order to measure the extent to which the economy has been stimulated (impact), changes in economic aspects need to be quantified. The application of economic simulation models on development projects' estimate figures, recorded higher than expected results in terms of the local and regional economic stimulation.

As the frontrunner in conducting Economic Impact Assessments, Urban-Econ Development Economists has worked with CMAI on all their significant development projects, including Thesen Islands, Crossways & Sunnyvale, Flamink Viei and Kurland.

In 1999, Urban-Econ conducted an Economic Impact Assessment for the redevelopment of Thesen Islands: The purpose of this impact assessment was to illustrate the potential positive impact that this redevelopment would have on the Knysna economy. Employment was used as an effective measure to illustrate the project's potential economic impact that was estimated through the application of the econometric Input-Output model:

Construction of the redevelopment project on Thesen Islands began in 2000, and was predicted to continue until the end of 2008. The 1999 economic impact assessment estimated that a total of 4,217 direct employment-years will be created during construction that equates to an average of 469 jobs that are sustained for a period of nine years. The project was also projected to create 862 sustainable employment opportunities during the operational phase.

Estimated Construction & Operational Employment 1999 I/O Model

Year	Construction Employment*	Operational Employment**
2000	527	n/a
2004	712	70
2008	203	223
2012	n/a	862
2015	n/a	862
Total	4,217	862

Source: Urban-Econ Calculations based on the I/O Model

\*Construction employment data is in man-years, thus employing

a construction worker for a period of one year

During 2005, five years after the completion of the economic impact assessment for the Thesen Island redevelopment project, Urban-Econ was asked to verify the original 1999 I/O Model's impact figures. This implied the comparison of the actual Thesen Island project's implementation figures to that of the anticipated results recorded by the 1999 economic simulation model. In order to compare the modelled versus the actual direct employment generated during both the construction and operation phases, data from 2000 up until the end of April 2005 was utilised:

It is evident that employment opportunities created during Phase 1 of the Thesen Island redevelopment were higher than the anticipated employment opportunities as recorded by the 1999 I/O Model, for both the construction and operational phases. An additional total of 873 construction jobs and 184 operational jobs were created over the estimated amounts.

1999 Modelled Employment Figures vs Actual Employment Figures 2005

Employment Category	1999 I/O Model Results
Construction	
Total for the period	2,469
Average annual employment	494
Operational (annual)	78





#### KURLAND ESTATE

The Crags, Plettenberg Bay

Set on a coastal plateau surrounded by the Tsitsikamma Berg Reserve, the Salt River Gorge and rural Crags community, this pioneering 'Rural Development Generator' is proposed as a new tourism and agricultural hub that will integrate the local Kurland village community, a new neighbourhood redeveloped on a timber mill and brickyard brownfield site, as well as two agricultural clusters set within the Kurland Polo Estate, to form a new 21st century South African settlement.

#### **Current Status:**

While scoping approval has been granted, the project is at present awaiting DEA&DP's (Dept Environmental Affairs & Development Planning) go-ahead on planning issues resulting from the unresolved Bitou Spatial Development Framework (SDF).



#### FLAMINK VLEI + CEREBOS Velddrif

Situated on the Southern bank of the Berg River leading into St Helena Bay – a yachting and water sport's haven – Flaminkvlei is envisioned as a rural marina village set within the context of the West Coast. Incorporating the Cerebos salt pans, which will form the new entry Into Velddrif from the south, and set within the existing salt pans, stilt-houses and a variety of small-holdings are amongst the housing opportunities offered by this unique and challenging project.

#### **Current Status:**

The project is still ongoing, with several planning issues from DEA&DP currently being addressed.

It should also be noted that approximately 75% of the total direct construction employment created by the Thesen Island redevelopment has been in the form of local employment opportunities in Knysna. It is estimated that about R189 million has been paid in salaries to local construction workers between 2000 and 2004.

The operational employment created included a total of 93% of local employment in the Knysna area. These high numbers of local employment opportunities for both the construction and operational categories will subsequently translate into additional stimulation of the local economy. The increased figures can, among others, be contributed to the fact that Thesen Island as a community is more service-orientated than the average community in the country, which resulted in a higher multiplier effect in certain sectors of the local economy.

Actual Implementation Figures	Difference
3,342	873
669	175
262	184

The 2005 verification of the original economic impact assessment that was done in 1999 by Urban-Econ for the Thesen Islands' redevelopment project provides evidence that the utilisation of economic simulation models, especially the I/O Model, is a conservative tool in forecasting the anticipated economic impacts of development projects within local and regional economies.

Economic impact assessments can thus form an important tool for authorities in determining to which extent a proposed development project will benefit their economy.



Article by Dr. Judex Oberholzer and Deirdre Oosthuizen

Development Economist





Centrally located within Plettenberg Bay, the proposed Piesang Valley village provides an ideal base for exploring the diverse natural beauty of the Garden Route. The compact nature of the project ensures the village centre is central to all residents, and provides access to various civic, commercial and residential opportunities. This will include a broad range of housing types including studio loft apartments, tower houses and larger freestanding residences, as well as a number of onsite facilities including a small retailoffice component, lifestyle retirement village, hotel and guest lodge, as well as a civic clubhouse and open park areas. **Current Status:** 

The project is currently awaiting ROD approval, with rezoning and guideplan amendments being prepared for municipal submission.

before

n the evolution of Thesen Harbour Town, the creation of an entry marker to identify Thesen's commercial core was highlighted as a valuable means of celebrating the unique and vibrant atmosphere of the Guided by a design brief enthused with overarching themes of simplicity and elegance, CMAI was approached by the Thesen Commercial Owners to design a classical signpost which echoes the nautical character of Harbour Town and the playful ambiance of Thesen Islands. From its Long Street location, the beacon marks the entry to Thesen Harbour Town. Identified by its iconic pinnacle shape, the logo is easily visible from both Waterfront Drive and Knysna Central, with subtle tones of white and simple material finishes which allow the sign to blend into the surrounding streetscape while simultaneously standing out against while simultaneously standing out against the backdrop of the Knysna Heads. Due to the nature of the sign as an object to draw attention, a kinetic disk shape, capable of spinning in a light breeze, was incorporated to emphasise the presence of the sign. Strictly adhering to Knysna's local by-laws, as well as preserving the dark sky policy of the islands, the signage is softly illuminated at night by warm lighting. Powered by several photo-voltaic panels, this soft glow is intended to entice visitors in the evenings to explore several choice restaurants along the harbours edge. In addition, low level advertising can also be used to further promote upcoming events and help sustain the ongoing maintenance of the signage.

With time, it is expected that the Thesen

Harbour Town Signpost will become a familiar reference point to local residents and tourists alike; an iconic and defining landmark of the Islands, reflecting the colourful and complex legacy of Thesen's

the evolution of

greetings

congratulations

...to Liezl, Margot, Tiaan and Gareth, who recently passed the national Architectural Professional Practice Exam. CMAI would also like to congratulate Mike Louw for obtaining his postgraduate degree cum laude. He recently completed his BPhil degree in

at the Sustainability Institute, which forms part of the University of Stellenbosch. The degree covers subjects ranging from Sustainable Development, Sustainable Cities, Ecological Design, Renewable Energy Systems, Energy Efficient Cities, Development Planning Theory & Practice, Development Planning & Environmental Analysis and Biodiversity & Sustainable Agriculture. The knowledge gained will

Sustainable Development Planning & Management cmai 1980

> CMAI is established as a multidisciplinary group of Land Planners, Architects, Urban Landscape and Architects with offices Pretoria, Cape Town, Durban and Mossel Bay [ 1980 -1994 ]



Belvidere



1998 CMAI opens head offices in Knysna on Thesen Islands.



2005

1994

the GREEN Company (Property Development Company) and the BLUE Company which is the professional practice Company 2008

involving Architecture, Urban Design & Landscape 2010 | Architecture.

CMAI split into two divisions:







he members of the Architectural Forum of Knysna and Plettenberg Bay have officially been recognised in their role as skilled advisors within the built environment, and have been formally appointed to serve on the Knysna Municipality's Aesthetics Committee on a rotational basis. Topics that draw the committee's attention include discussions on architecture and urban design, new and future legislation, as well as the promotion of professional development.

The Architectural Forum of Knysna and Plettenberg Bay (AFKP) meets every month and engages in issues concerning the growth and development of our towns, our visitors and its inhabitants.

Anyone in the field of Architecture who has an interest in joining the AFKP can email: cordia@ theboatshed.co.za



most certainly be put to good use!

Izilokotho Ezihle Zamaholdeni

hesen's Famous Yellowwood [right] is seen admired by Interior Design student's from NMMU who were given a tour of Thesen Islands during July this year. Taken from a large Outeniqua Yellowwood which once stood in Lottering Forest in Tsitsikamma, the tree was blown down during a storm in 1962 after having reached an age of over 650 years.

After standing in the Thesen boardroom until the Island's redevelopment, the section was donated to the Thesen Islands Commercial Owners Association, and was mounted in its present position in August 2008, forming part of the Thesen Islands Heritage Walk.





ARCHITECTURAL FORUM OF KNYSNA & PLETTENBERG BAY

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# xcella

MAI has received the highest honour at the awards ceremony awards ceremony te for Landscape the Institute Architecture (ILASA). Southern Africa in

Reconstituted in 1998, ILASA is a voluntary association established to advance and promote the role of landscape architecture as a profession within both the natural and built environment, as well as the Southern African economy.

Presented by the National Executive Committee of ILASA at a prestigious function held on 5 September 2009, Dr. Chris Mulder of CMAI, described in ILASA's commendation as "a landscape architect with remarkable vision", collected the Institute's President's Award for excellence in design for the development of Thesen Islands, as well as being honoured as one of three icons of landscape architecture in South Africa.

Staged every alternate year, the ILASA Awards of Excellence celebrate the work of professionals by giving recognition to work that has surpassed the professional standard expected of landscape architects at any stage of design and development.

An unprecedented 13 projects across five categories received awards.



