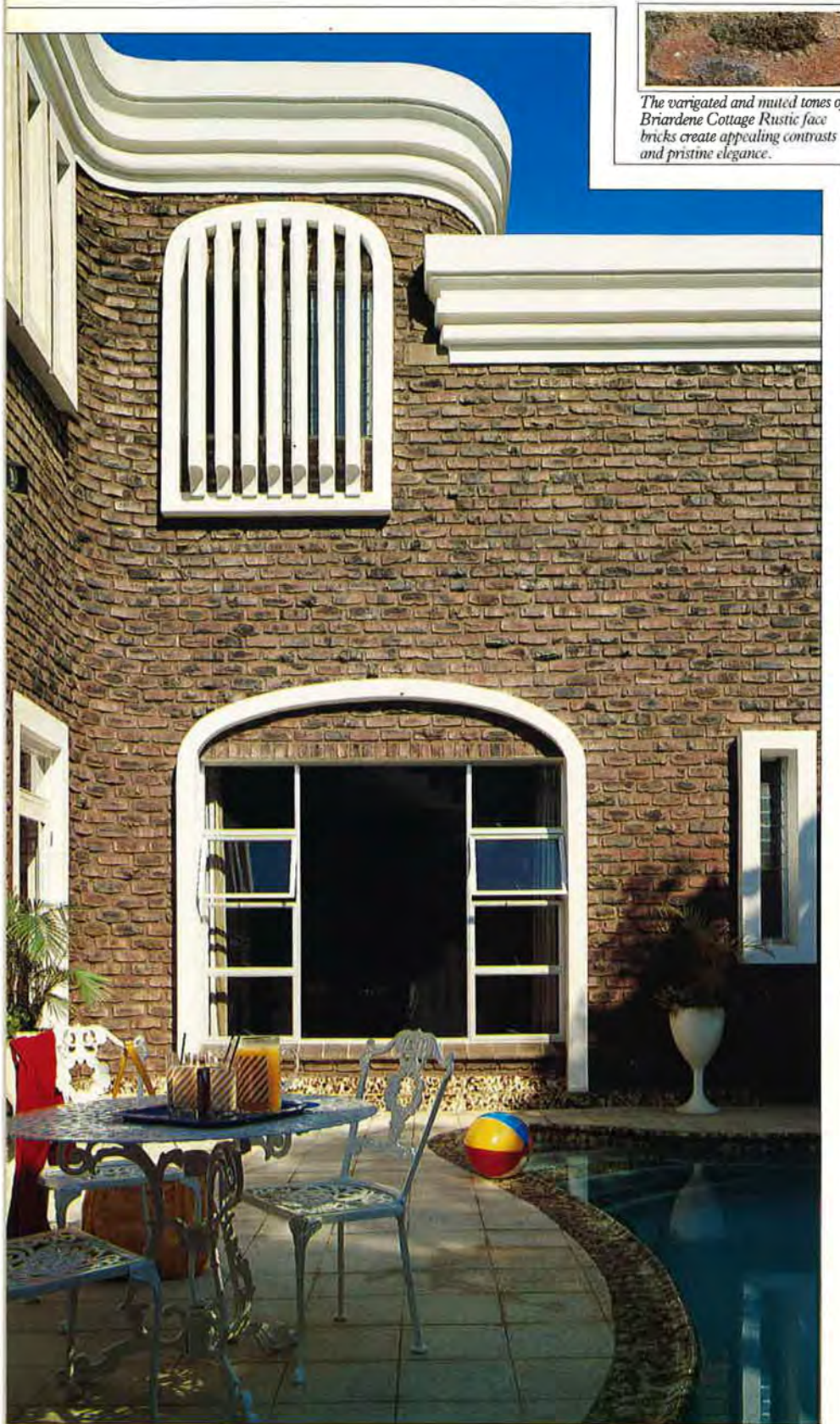


DURBAN EXPO '85



The variegated and muted tones of Briardene Cottage Rustic face bricks create appealing contrasts and pristine elegance.

A BRICK IS NOT A BRICK
ANYMORE
NO LONGER A FACE OF
IMPASSIVE UTILITY
BUT AGELESS BEAUTY THAT
TRANSCENDS
TIME AND CHANGE
COROBRICK CLAY FACE BRICK
HARMONIZING WITH THE
ELEMENTS, EMOTIONS
MOVING WITH AND BEYOND
PROGRESS
ALWAYS AT THE HEART OF
LIVING CREATIONS
TO ENHANCE
TO ADD SOUL
AND VIBRANCY OF COLOUR
AND TEXTURE
TO WOOD
TO GLASS
TO ALUMINIUM
TO LIFE.

COROBRICK CLAY FACE BRICK
EVER PRESENT IN STRENGTH
INFINITE IN BEAUTY
LIVING IN HARMONY.
NO LONGER A BRICK
BUT THE FULFILLMENT OF
CREATIVE
EVOLUTION.



COROBRICK

SURROUND YOURSELF WITH THE STRENGTH OF COROBRICK.



NPIA

ISSUE 1/1986 ● VOLUME 11
UITGAWE 1/1986 ● JAARGANG 11
ISSN 0379-9304

JOURNAL OF THE
NATAL PROVINCIAL
INSTITUTE OF
ARCHITECTS

TYDSKRIF VAN
DIE NATALSE
PROVINSIALE
INSTITUUT VAN
ARGITEKTE

EDITOR/REDAKTEUR

Dr Walter Peters

**EDITORIAL ASSISTANT/
REDAKSIONELE ASSISTENT**

Jessie Birss

DESIGN/ONTWERP

Monica Göbel

PUBLISHED BY

The Natal Provincial
Institute of Architects
P.O. Box 777

Durban

4000

Telephone: (031) 3047345

UITGEGEE DEUR

Die Natalse Provinsiale

Instituut van Argitekte

Posbus 777

Durban

4000

Telefoon: (031) 3047345

COVER CREDITS:

Aquacade, Lipton Tea Pavilion
and Alusaf Ball Clock by Craig
Hudson.

Zulu indlu and musical fountain
courtesy of KFC.

Music tent and pedestrian bridge
by Skyline Studio.

Rendering of southern precinct of
the site by courtesy of Rodney
Kenyon and Associates.

NPIAJ gratefully
acknowledges the help of
Jim Watson, site architect to
Expo '85, in the preparation
of this issue. Editor.

EDITORIAL: EXPO '85

Durban Expo '85 ran from 5 October 1985 to 12 January 1986. It took two years of planning, a short period considering the implementation of major urban design decisions besides the actual exposition.

Expo '85 was a major architectural event and this issue of *NPIAJ* focuses on the participation of architects. The idea of Expo '85 stemmed from Hans Hallen who, in a letter to the Durban City Council in August 1982, suggested the City should celebrate its 150th birthday with an exposition on the old station site. Councillor Don Smith became Chairman of Expo '85. ZAI rehabilitated the Victorian railway workshops on the site as a permanent exhibition centre (see *Architecture SA 7.8/84*). An architects' consortium "Expo Associates" consisting of the firms Hallen, Theron and Partners Inc, Franklin Garland, Gibson & Partners and Johnson Murray Architects, prepared the master plan and were, together with other firms, commissioned for various pavilions and exhibits. Some pavilions were a result of competitions, both open and limited.

Expo was a pleasure. The architects involved had a rare opportunity to put into practice novel, exciting and experimental ideas. They made the most of it within the very meagre budgets for the temporary buildings.

Expo opened up a part of Durban, the standards in architecture and landscaping setting the tone for Durban's future. Much of the work in the City Centre was brought forward, Expo became a catalyst for more than the exposition of three months duration.

The economic forecast did not pan out as predicted. International participation did not materialise, the absence explicable in political terms. Despite that, Expo offered its patrons good value for money and, while celebrating Durban's past achievement, affirmed confidence in the future of the city. As Durban's motto has it: "Better fortune will follow a weak beginning."

Walter Peters, Editor

THOUGHTS ON EXPO

Expo has left many skills in the society. The task had not been done before, the potential exhibitors had never exhibited in anything other than trade fairs, and those running the show had to start from scratch.

The show needed an overall visual coherence and identity, easy and comfortable pedestrian directions, as well as elements of surprise and interest at every turn. Whilst this was in the main achieved, there was disappointment at the inability to 'sell' the idea of more easily accessible exhibits. Too many were static, lacked the possibility of interaction and personal involvement, and many an excellent idea was still-born to the disappointment of the Expo team.

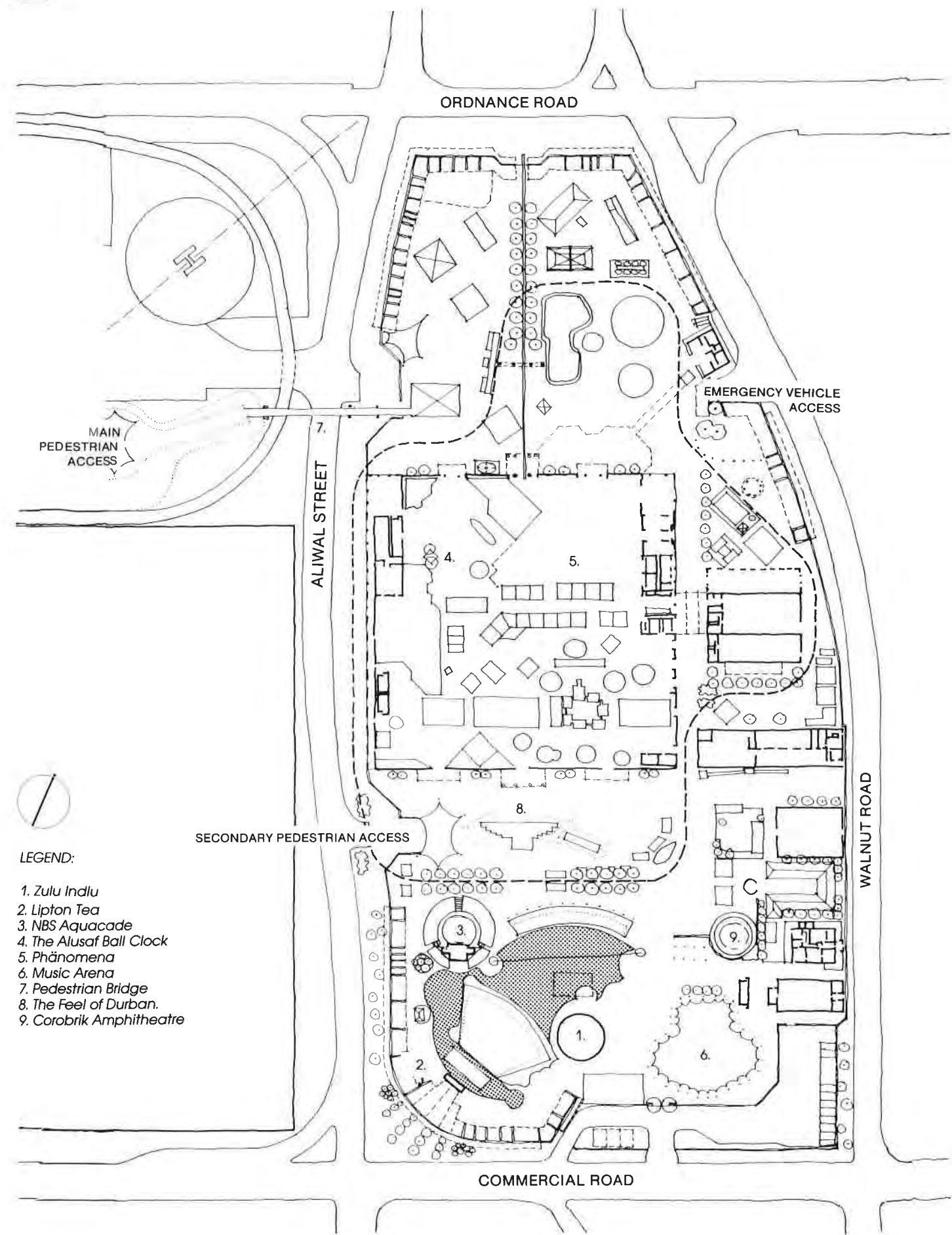
But as the Editor has pointed out, Expo did something that was needed, it encouraged and developed self-esteem in the community, and has left resources in buildings and skills, and at a time of depression it raised spirits.

Jobs were created across a broad section of the community and the walkways and pedestrian streets were filled with visitors of all races in what seemed a model of a new society and a new city. This was not the least important aim of its 'secret' agenda.

Hans Hallen

EXPO '85 SITE PLAN

EXPO ASSOCIATES
HALLEN THERON &
PARTNERS INC



ZULU INDLU

THE KWA ZULU FINANCE CORPORATION AND KWA ZULU GOVERNMENT EXHIBIT

MIKULA & JOHNSON ARCHITECTS

We set out to create a display which would be memorable. While there is obviously a danger of being seen to be "cute" by building a traditional grass indlu, albeit the largest one ever constructed, we felt that an exhibition such as this should create a world of fantasy which would imprint itself on the memory of the hundreds of thousands of visitors who passed through it. The building celebrated ingenuity and craft while the displays pinpoint the wonderful resources and desperate plight of the underprivileged people in Kwa Zulu.

The building measures some 18 meters across, is 9 meters in height and is built entirely in the traditional way with saplings set into the earth and tied at each intersection. The vertical poles which support the structure in the centre have been used to create an interior space which holds the exhibits. An open mezzanine for the showing of audio-visuals allows the visitors to experience the height and provides exciting glimpses onto the displays. The exhibition screens are built from empty beer cartons, mud-plastered at times, into and onto which the backlit displays have been set.

I am pleased that we managed to employ over 100 people in the making of this structure, allowing most of the money spent to feed back into Kwa Zulu to grass cutters, weavers, bead artists, rope platters and our very skilled construction team.

The structure behaved beautifully. Like a huge basket it moves and deflects with pressure yet remains absolutely secure.

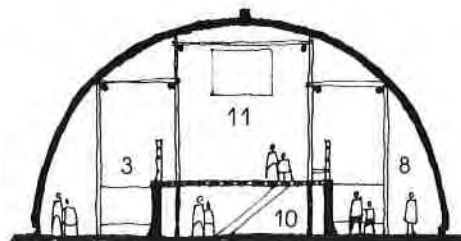
We have just had a letter from the City Engineer's department requesting a stability certificate.

Paul Mikula

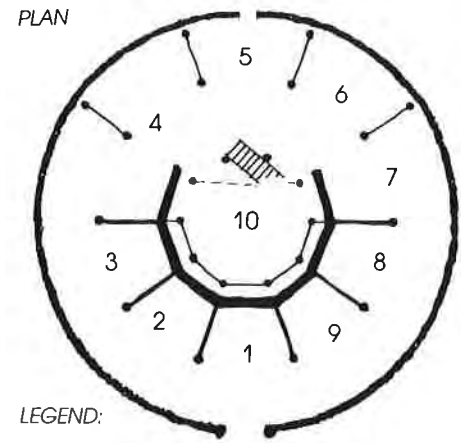
LIPTON TEA PAVILION EXPO '85

JOHNSON MURRAY ARCHITECTS

The essentially English tradition of tea drinking has been dramatised by the theatrical effects of simple archetectonic idioms and vibrant colours. Four large square piers crowned with planters give the appearance of stately pylons creating a portico where the pleasures of tea drinking are indulged in.



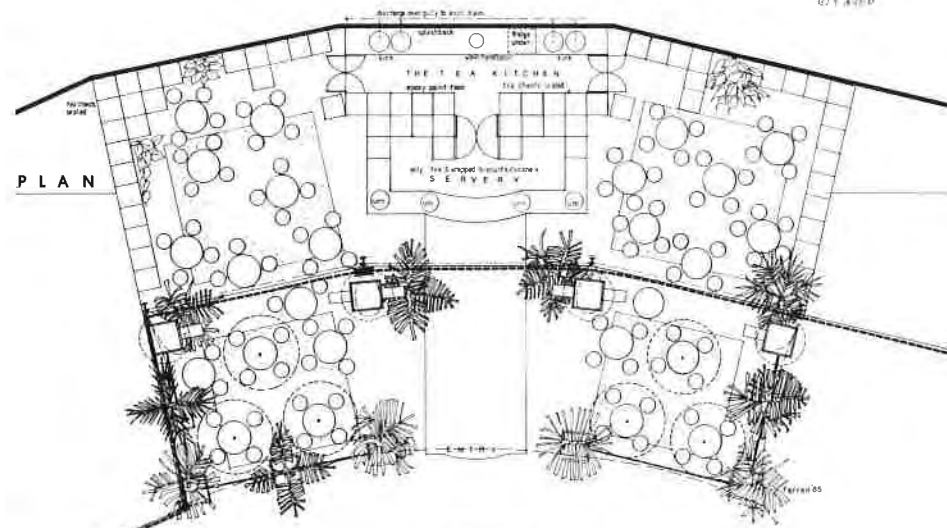
SECTION



PLAN

LEGEND:

1. Information
- 2/3. History and Prehistory
4. Natural resources
5. African Huts Centre
6. Agriculture
7. Education
8. Health
9. Government
10. Kwa Zulu Finance Corporation
11. Audiovisuals



PLAN



SECTION

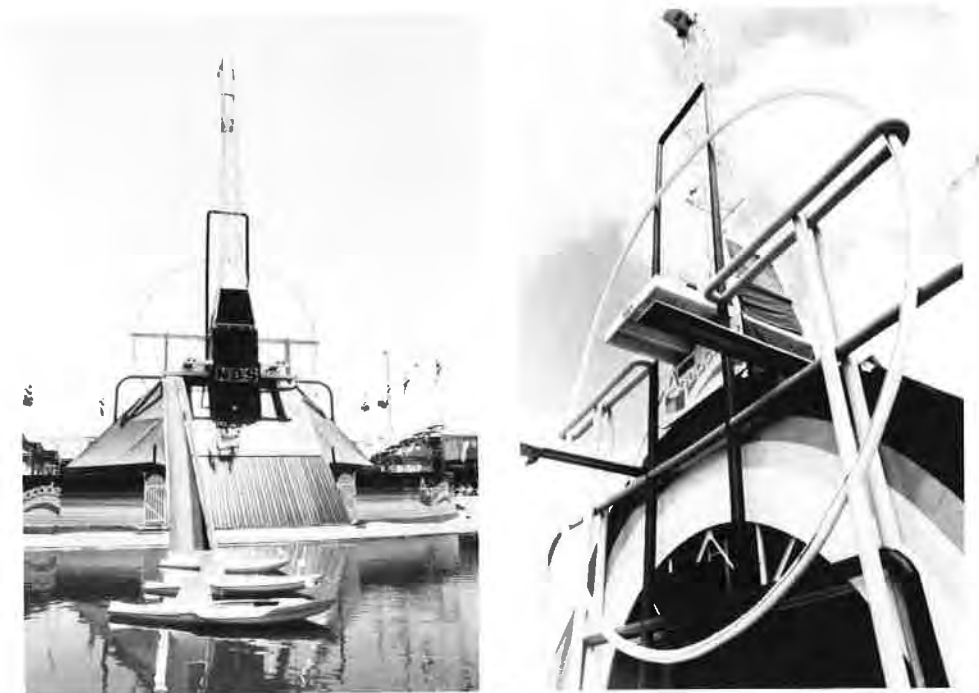
1:50

NBS AQUACADE

EXPO ASSOCIATES
JOHNSON MURRAY ARCHITECTS

The Aquacade proved to be the most popular of the Expo exhibits. Designed to accommodate synchronised swimming, display and comedy diving, the Aquacade consisted of a 4m deep circular pool with a 25m high diving platform, an 8m high fixed platform and twin 5m Olympic spring boards.

The six hundred seats are arranged in concentric tiers on scaffolding around the pool providing total visibility of the swimmers and divers. The diving tower was constructed out of light steel angles rising from a wedge shaped, PVC clad base structure, which contained the dressing rooms.



THE ALUSAF BALL CLOCK

JOHNSON MURRAY ARCHITECTS

The basic concept of the ball clock was rationalised into two systems of spirals fed by a chain driven vertical ball lift. The idea is that 300 mm diameter balls are deposited at half minute intervals into the system of "see-saw" devices that indicate the time in half minutes, tens of minutes and hours.

The clock is 10m high and constructed of anodised aluminium tubing. The junctions have been designed as balls creating beautiful cast aluminium knuckle joints. The base is made up of back-lit 3.8 m x 2.4 glass panels with photographs and the story of aluminium sand blasted onto them.

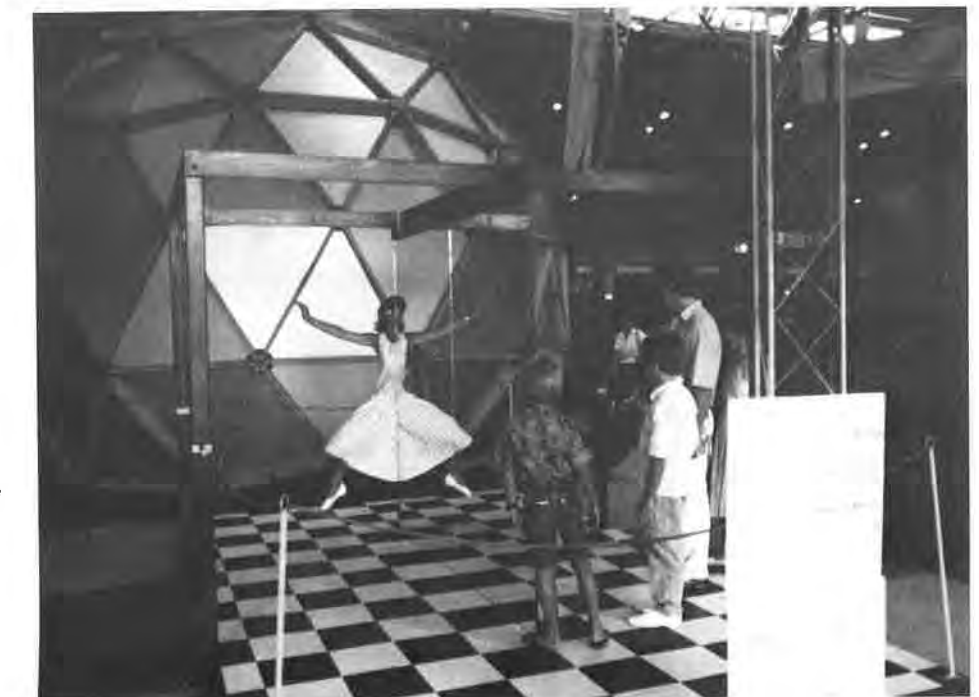


PHÄNOMENA EXPO '85

JOHNSON MURRAY ARCHITECTS

"Phänomena" was a "hands on" exhibition designed to give people the opportunity to become acquainted with various natural phenomena and to understand more about their causes and effects in order to awaken and expand their interest in the environment.

"Phänomena" was developed in Switzerland by the Zürcher Forum and introduced to the Expo Association by the Novalis Institute. Experiments in Sound, Light, Water, Mechanics, Air and Acoustics were laid out in the main exhibition hall and expanded outside on four main axes, the Sunlight axis, the Echo axis, the Whisper axis and the Recoil axis.



MUSIC ARENA AND PEDESTRIAN BRIDGE

EXPO ASSOCIATES
FRANKLIN, GARLAND
GIBSON & PARTNERS

At a time of an Expo it would be hoped that there would be an opportunity for new structures which are either inventive or make an appearance for the first time locally.

Two examples of firsts for South Africa at Durban Expo should be mentioned. The "Music Arena" fabric tension structure and the steel suspension pedestrian bridge over Aliwal Street onto the site.

Not only was the tension structure designed in Durban but it was manufactured locally using South African material, all a first in South Africa. The Music Arena seating over 800 people was erected at a comparatively low cost and has been a great success acoustically and visually, providing a futuristic sculptural dimension to the site. The structure will be dismantled for reuse after Expo closes. Further examples of tension structures on the site by the same team are the two arched entrance canopies and the soaring band-stand, all of which will be dismantled and re-erected elsewhere.

The steel suspension pedestrian bridge is described as an a symmetrical cable-stayed bridge supported off a single "A" shaped pylon with the cables in a fan shape and incorporating a composite concrete deck. It is hoped that this pedestrian bridge can be retained by the city as one further permanent reminder of Durban Expo '85.

Don Perks



PROFESSIONAL TEAM:

"MUSIC ARENA"
Engineers Flexible Structures
Manufacturers Marquee and Tents

PEDESTRIAN BRIDGE
Engineers Home Glasson and Partners
Manufacturers Bentley Taylor

THE FEEL OF DURBAN

MYLES, PUGH,
SHERLOCK,
JARVIS

A competition for the design of a structure to be erected at the Expo site, that would illustrate "The Feel of Durban", was promoted by the Natal Provincial Institute of Architects together with the Chambers of Commerce and Industry, the Afrikaanse Sakekamer and the Durban Publicity Association.

The name Durban is synonymous with the sea, both from a recreational point of view and it's role as a port city. We chose to illustrate this image by creating a wave breaking on a beach with the public being drawn through the 'tube'.

The structure was sited on two main axes, the axis running east west from the main entrance to the Expo area and at right angles on the axis of the main entrance to the exhibition hall.

We created a tubular steel support structure over which sheet metal cladding curved to follow the flow formation of a wave breaking on the shore, running down into shaped sand berms which for practical purposes had to be grassed and could not be left as beach dunes.

COROBRIK AMPHITHEATRE

MLH & HAMLIN

Corobrik invited four architects to submit design proposals for a pavilion to be used for Expo '85.

The brief was to provide a 'fun' building, that would serve a lively function during Expo and yet serve an ongoing purpose for the people of Durban after Expo. A requirement was to emphasise decorative and structural use of brickwork and to serve as an exhibit for some of the Company's range of products.

The design defines the space by a drop in level and by columns and beams that extend out into the pedestrian areas thereby increasing awareness of the structure and encouraging movement into the space.

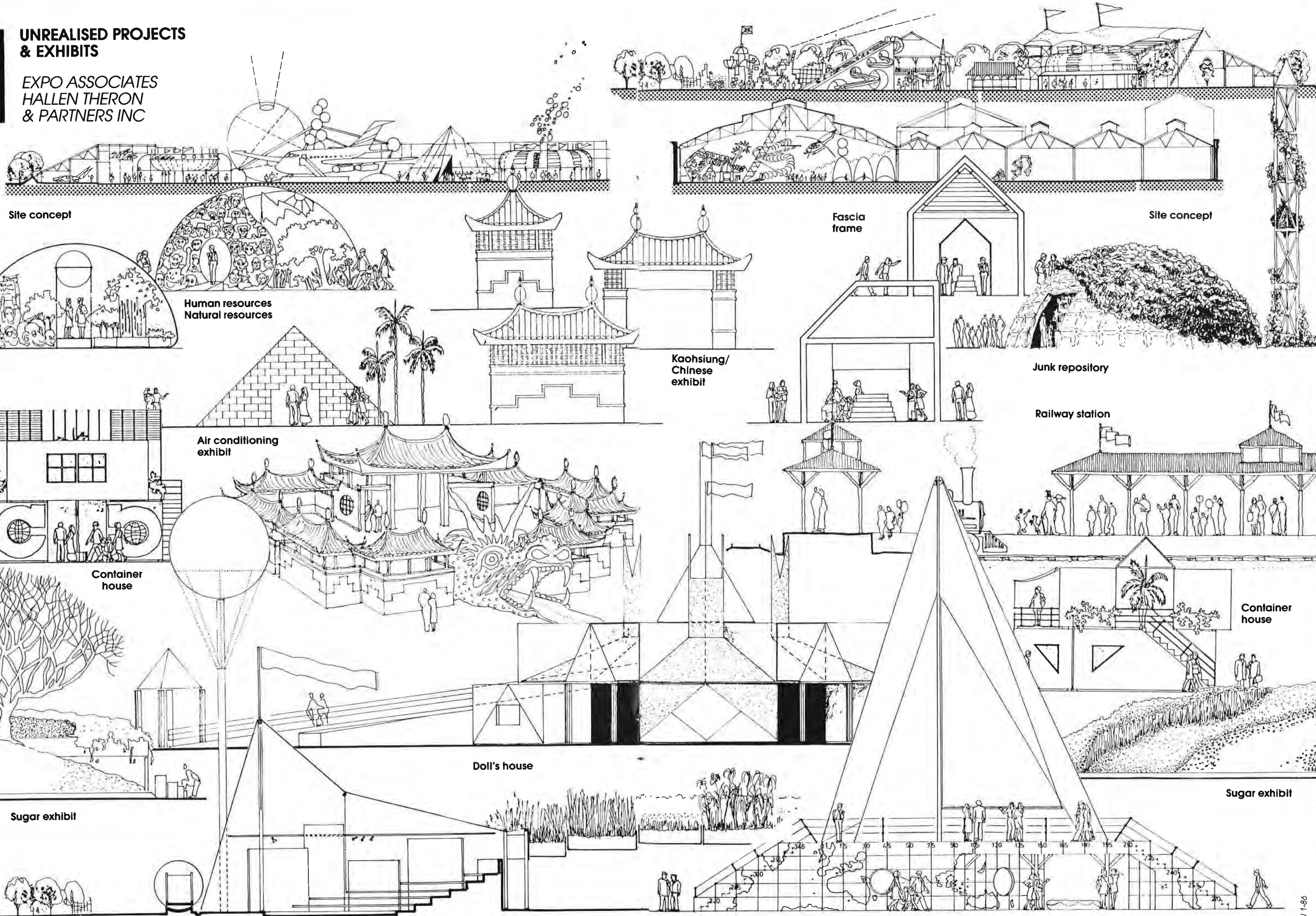
The building's close proximity to the Station Workshop Theatre Group provided good reason for it being a venue for spontaneous dramatic or musical performances, busking and small shows. In addition, the facility will be used for exhibitions and market-related activities. Covered spaces were provided on the southern side to be used for a potter, a ceramic artist, a glassblower and an exhibition and sales area, while providing shelter from sun and rain and protection of the amphitheatre from the wind.

The sense of place is enhanced by dropping the level in three equal steps, each step suitable for seating and thereby creating the bowl of an amphitheatre.



**UNREALISED PROJECTS
& EXHIBITS**

EXPO ASSOCIATES
HALLEN THERON
& PARTNERS INC



Site concept

Human resources
Natural resources

Air conditioning
exhibit

Container
house

Sugar exhibit

Circus arena

Kaohsiung/
Chinese
exhibit

Fascia
frame

Doll's house

Round-the-World yacht racer

Site concept

Junk repository

Railway station

Container
house

Sugar exhibit

PRACTICE NOTICES

Changes in partnerships, practices, etc.

From 31 August 1985 Mr J H Hesketh has withdrawn from the partnership of Hesketh, Driman and Partners but remains with them as a Consultant.

Mr H Ramadhin has entered into the existing partnership of Messrs P P Smith and Mr E Singh (a town planner) under the style of E Singh Associates.

Messrs B H Lee, M J Bouille, Y Patel and A S Seedat have entered into a partnership under the style of Architects Collaborative. From 1 October 1985 Messrs A Skordis, C Dibb, M G Dibb and B R Servant entered into partnership under the style of Dibb Skordis Associates.

Changes in Addresses

Mr A J Watson to 13 Bishop Road, Stamford Hill, Durban

Mr P H P F Allen to PO Box 18, Umtata, Transkei
M P A Thompson to Suite 3, Holy Cross Building, Craister Street, Umtata

Messrs D W J McLagan and D W Christer to 46 Patricia Road, Ballito

Mr H R Wade to 28 Broadlands, 105 Waterkant Road, Durban North

Mr P B D Jones to 44 York Avenue, Scottsville, Pietermaritzburg

Mr P Coetzee to 79 Goble Road, Morningside, Durban

Mr P N Culligan to Private Bag 54330, Durban

Mr P F Pretorius to 14 Davidson Crescent, Malvern 4093

Mr M H Kendall to 203 Register Avenue, Rogers Forge, Baltimore 21212, USA

Changes in Membership

Mr C W Barnes from NPI to TPI

Mr P H van Coller from NPI to CPI

Mr B P Weideman from NPI to OFSPI

Mr V D Matthews (Ordinary), PO Box 48067, Qualbert 4078

Mr A N Pratt (Ordinary), 3 Sherwood, 138 Roberts Road, Durban

Mrs N M H Palmer (Ordinary), 9 Chelsea Mews, Sunnyside Lane, Pinetown

Mr R B Palmer (Ordinary), 9 Chelsea Mews, Sunnyside Lane, Pinetown

Mrs C J Wyrill (formerly AnT now Ordinary), 80 Rapson Road, Durban

Mr E J Bain (AnT), 462 Currie Road, Durban

Mr P C Meirelles (Ordinary), 5 Westcross Road, Overport, Durban

Mr R C Clark (Ordinary), PO Box 3033, Durban 4000

Mr E V Plekker (formerly AnT now Ordinary)

Resignations
Mr C J Mennel
Mr M G Legg

LETTERS

Student barber

Dear Dr Peters
NPIA JOURNAL
Having recently read your latest issue of *NPIA*, I would like to congratulate you on the high standard of your publication. Although I realise that it is published by the Natal Provincial Institute, I would like to know if it could be possible to subscribe to your magazine. Also, I would very much like to obtain the issue dated 4-1985 as it is of particular interest to me.

I have posted a copy of *Architext* (the UCT Architectural Publication) of which I am editor. You should receive it shortly.

Stefan Antoni
University of Cape Town.

Heads of schools were mailed an additional six copies of *NPIA* issues. The intention was that these would be distributed to the student associations. As this has apparently not transpired, *NPIA* will as of this year instead be mailed directly to the student associations. Thank you for a personal copy of *Architext*. Editor.

NPIAJ CELEBRATES A DECADE

This year marks the tenth anniversary of the publication of the *NPIA Journal*. The first issue appeared in 1976 as a newsletter under the able editorship of Danie Theron. Danie's enthusiasm, literary ability and the respect he enjoyed as a critic immediately set a high standard. His well known penchant for controversial issues made the newsletter an interesting chronicle of its time.

Our current editor, Dr. Wally Peters took over responsibility for the publication in 1981. In 1983, it was felt that it would be more appropriate for the publication to be re-named "The Journal of The Natal Provincial Institute of Architects". It continued with its aim of serving members by illustrating current architectural interests and concerns.

It is appropriate, while contemplating its past performance, to reprint a statement made in the first issue by the then President of the Natal Provincial Institute of Architects, Myles Jackson:

"The NPI's Committee has sought, for some time, a means of making members more conversant with matters which affect them collectively. After all, no man, particularly an architect, is an island, and we share many interests and problems which require a forum for expression and the exchange of ideas."

There is no doubt that this journal has satisfied that intention.

All this would not have occurred without the generous assistance of *Corobrik* who have unstintingly sponsored every copy of the publication without any strings attached. For the contribution to the promotion of good architecture in Natal we are all most grateful. To date, the Journal has been distributed to city councillors in Durban and Pietermaritzburg, all Natal members of the Institute of South African Architects and to architectural practices in other provinces. With this issue the circulation is being increased to include the Natal members of SAPOA and the Master Builders' Association.

It is a significant achievement that this Journal has survived 10 years. Very few professional magazines, let alone an amateur production such as ours, can boast such a long period of publication.

Maurice Dibb

NPIA SUB-COMMITTEES AND REPRESENTATIVES 1986/87

Professional Promotion Directorate: (a sub-committee of National Board)
Mr M G Dibb.

Practice Committee: (formerly RD & S and a sub-committee of National Board
Mr D A Sherlock.

Heritage Committee:
Mr J A Frost (Chairman). Membership of this committee as heretofore would be left to the Chairman as its membership comprised City Councillors, and a number of non-Architects.

MBA Inter-Disciplinary Committee:
Messrs M G Dibb, D A Sherlock, F A Vos and Prof E Tollman.

Editor — NPIA Journal:
Dr W H Peters.

Durban Chamber of Commerce Co-ordinating Committee on Regional Planning:
Mr B Hill.

Observer — Durban Chamber of Commerce Civic Affairs Committee:
Mr D C Boyd.

Building By-Laws Liaison Committee of the City of Durban:
Mr L S Williams, Mr F A Vos.

University/Institute Liaison Committee:
Messrs S N Tomkin, G E Seitter, K H Alcock, M G Dibb, J L H Smith, with Prof E Tollman, Dr W H Peters and Mr P Stewart representing the University.

Education Levy Allocation Sub-Committee:
Messrs M G Dibb, D A Sherlock, Profs D N Dyke-Wells, E Tollman, Dr W H Peters.

Visiting Lecturers Sub-Committee:
Mrs S A Grobler, Messrs B C Johnson, I Daniel, D C Boyd, A Ogilvie, P A Gibson, M G Dibb, L W Williams, R J Platt, J A Frost, P Batho, G R Small — with powers to co-opt.

Computer Applications Sub-Committee:
Messrs R J Platt (Chairman), K Breetzke, A Ogilvie, P Batho, C Dibb, K Howie,

OF PUBLICATION : 1976—1986

A DECADE LATER

"There is only one way to achieve happiness on this terrestrial ball, and that is to have a clear conscience or none at all . . ."

Ogden Nash

Whilst I am perfectly aware of the fact that I am reputed to fall in Ogden Nash's latter category, I do have a clear conscience — at least as far as the *NPIA Journal* is concerned. After ten years I think it is safe to reveal that the *Journal* was launched with great trepidation, as there existed at that time still a wide-spread feeling within the Institute that the only way to be safe was never to try anything for the first time. Like the owners of parking garages, nobody wanted to take responsibility. But with the support of *Corobrik* as sponsor and Hilary Heunis as printer and with the encouragement and co-operation of many of my architect friends like Chris Cornford, John Frost, Pefer Stewart, Errol Haarhof, Hans Hallen, Paul Mikula, Brian Kearney, and others, we launched into print.

Reactions at first were not always overfriendly — one colleague berated me at length for several printing errors and went on to conclude that he also "disapproved totally of the topology (sic) of the journal". Not one to take uninformed criticism lightly, I co-opted Monica Göbel to take care of graphics and layout in order to achieve a greater degree of polish (and?) finesse. Fun was had by all, even, I suspect, by the readers which was all that I suppose could be expected in the feverish Natalian climate of the time. Whatever setbacks there might have been, the *Journal's* reputation (like that of Bernard Shaw) grew with every such failure and the *Journal* matured in quality. But it needed the cooler northern determination of its second editor, Wally Peters, to bring it to its present state of quality. Today it still is, as it was 10 years ago, a unique publication in this country, one of which the Natal Provincial Institute of Architects can be justly proud.

Danie Theron

G Carter-Brown — with powers to co-opt.

Functions Sub-Committee:
Messrs R J Platt (Chairman), D C Boyd, P Batho, S D J Baillon, Mrs S A Grobler — with powers to co-opt.

Public Relations Sub-Committee:
Messrs B C Johnson (Chairman), J A Frost, R J Platt, S D J Baillon, Dr W H Peters — with powers to co-opt.

Committee on Planning:
Profs E Tollman (Chairman), M Kahn, Messrs S N Tomkin, P A Gibson, R J Platt, J L H Smith, R Harber, C A Levick, D C Boyd and Dr E J Haarhoff.

NPI Premises Sub-Committee:
Messrs B C Johnson (Chairman), M G Dibb, J A Frost, D A Sherlock.

Executive Committee:
It was agreed to re-appoint an Executive Committee, the membership of which would comprise the President, Vice-President and immediate past President, with Messrs F A Voss and R J Platt as alternates.

PRODUCT NEWS

A new carpeting range, recently subjected to a most stringent test at the feet of 800 000 people at Expo '85, passed with flying colours.

Accent I and Accent II, products of Contract Carpet Manufacturings (CCM), a division of Van Dyck Carpets, covered the floor surrounding the most popular exhibit at Expo — the Phänomena.

After 3 months of intensive and continuous traffic, the 1 000 square metres of CCM sponsored carpeting was returned in perfect condition.

The 100 percent polypropylene Accent I and II was laid in an attractive checkerboard effect using the light grey and brown-grey colours.

Mr Nils von Klempener, special projects executive for Expo, said in a letter to Mr Lynton Sommerville, marketing director of CCM: "We were extremely pleased with the manner in which the carpeting stood up to the wear and tear to which it was subjected and, on closing day, it looked as good as new."

In future this carpeting will continue to be tested for performance and appearance retention, at the CCM laboratory.

Potential buyers looking for resilient, easy to maintain, attractive carpeting suitable for all purposes, should not bypass Accent I and Accent II, which have more than proved their worth.

Amphitheatre given to the people of Durban

His Worship the Mayor of Durban, Councillor Stanley H Lange, and Mr Errol Rutherford, managing director of Toncoro Limited, last night toasted the people of Durban as the *Corobrik* amphitheatre was handed over to the city in a private function at the Expo site.

The R280 000 building will be used as a permanent venue for outdoor plays, lunchtime concerts, busking performances and art shows. VIPs and city councillors were given a taste of things to come when the Sneddon Theatre Company presented excerpts from their production of Jacques Brel during the handover ceremony.

The amphitheatre, designed by Durban architects Mallows, Louw, Hoffe and Hamlin, was the winning design chosen from entries submitted by a number of local architects for the *Corobrik* exhibition at Expo '85.

Toncoro's brief called for an exhibit that would serve as a lively function venue during Expo '85, and which would become a permanent feature and have an ongoing purpose for the people of the city. The design was to emphasise the decorative and structural use of brickwork in a functional structure.

The structure is an excellent example of the classical amphitheatre but is built entirely of modern clay bricks. Creative use has been made of the new range of special shaped bricks available from *Corobrik*.

To ensure a truly low maintenance building, stainless steel was used for all reinforcing in the face brick columns and beams and all sand and cement was tested by PCI as only the highest grades were to be used in the mortars.

Built by contractors Alexander Hamilton (Pty) Ltd, the amphitheatre is a fine example of creative brickwork, not often seen in modern building where the emphasis is too often on speed rather than aesthetics and quality.

Quality of workmanship was all important yet the project had to be built in two and a half months, one month less than the usual building time. Ten top bricklayers were therefore selected for the project. They saw the amphitheatre as a rare opportunity and a challenge for their talents and skills.

In handing over the building, Mr Rutherford paid tribute to the positive work being done by the Beach and City Steering Committee in beautifying Durban. "By donating the amphitheatre, *Corobrik* is proud to play a role in the effort of making Durban a better place to live for all its citizens," he said.